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ADOLESCENTS' PERCEPTIONS OF AND EXPERIENCES WITH PRENATAL CLASSES

by

SARA LESLIE SUNDBY ©

A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfillment of the requirements for the degree of MASTER OF NURSING.

FACULTY OF NURSING

Edmonton, Alberta

Fall 1995

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SLSundby

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Aug. 30/95

Of all of life choices,
none are more important to society,
none has more far reaching consequences,
none represents a more complete blending of social,
        biological, and emotional forces
than bringing another life into the world.

Victor Fuchs

University of Alberta

Faculty of Graduate Studies and Research

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled **ADOLESCENTS' PERCEPTIONS OF AND EXPERIENCES WITH PRENATAL CLASSES** submitted by **LESLIE SUNDBY** in partial fulfillment of the requirements for the degree of **MASTER OF NURSING**.

Peggy Anne Field
Dr. P.A. Field

M. Ruth Elliott
Dr. R. Elliott

Gretchen C. Hess
Dr. G. Hess

28 August 1995
Date

DEDICATION

To my mother whose determination I seem to have inherited and who always made me believe I could shoot for the moon.

To my husband Eric for believing in me and supporting me in countless ways.

To Ben and Aly, the loves of my life, who will one day soon be adolescents.

Abstract

The purpose of this study was to describe adolescents' perceptions of and experiences with prenatal classes. A qualitative exploratory-descriptive research approach was used. Eleven adolescent females, ages 14 - 17 years who attended a minimum of three prenatal classes during their pregnancies were interviewed between two and twelve weeks postpartum. Content analysis of the data was done using the constant comparative method and eight categories were formulated: (1) motivated to learn, (2) quest for information, (3) information gained, (4) not feeling prepared, (5) barriers to learning, (6) preferred teaching-learning methods, (7) non-preferred teaching-learning methods and (8) suggestions for change. In order to have a beginning understanding of the context of the participants' world, biographical data and information about making the transition to parenthood were obtained. The conclusions from this research study can assist nurses and other health care professionals to plan and implement adolescent prenatal classes that are developmentally appropriate and sensitive and likely to meet the needs of the pregnant adolescents attending them.

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I would like to thank the many individuals who assisted and supported me with this research study. Thanks to the teens who shared their thoughts and experiences with me. Their openness and insight were invaluable and I appreciate the time they took out of their very busy lives to talk to me. Thanks also to the managers and prenatal instructors at each site who supported my research and facilitated access to their facilities and prenatal classes.

I would also like to thank my thesis committee. Dr. Peggy Anne Field, my thesis supervisor, provided guidance and support throughout this study. She always found the time to answer questions, discuss ideas, and wait for the light to come on in my head. Dr. Ruth Elliott and Dr. Gretchen Hess provided added support, expertise and perspective. Their interest in adolescence helped keep my spark going.

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CHAPTER 1

INTRODUCTION

Since the 1960s, Canadian statistics have reflected an increase in the number and rate of births to unwed adolescent mothers, sexual activity and sexually transmitted diseases among adolescents, and research documenting the negative consequences of early pregnancy, childbearing and childrearing (Baldwin, 1981; Santelli & Kirby, 1992; Stevens-Simon & White, 1991). The tremendous emotional, social and financial costs of adolescent pregnancy and parenthood have generated increased concern among health care professionals and the general public. According to Wadhera and Strachan (1991), the pregnancy rate in Canada in 1985 for girls 15-19 years of age was 44:1000 females in the stated age range. In Alberta, it is estimated that 79 adolescents between the ages of 10-14 were pregnant in 1990 representing an estimated pregnancy rate of 0.9/1000 females in the stated age range. Among 15-19 year olds, it is estimated that 4,576 adolescents were pregnant in 1990 representing an estimated pregnancy rate of 51.9/1000 in the stated age group (Alberta Health, 1991). Health care professionals have known for a long time that maternal, fetal and neonatal risks are highest at the extremes of reproductive age. Pregnancy in the young adolescent is associated with an increased perinatal death rate. Over 18% of premature deliveries occur in this age group (Ranjan, 1993).

The problem of adolescent pregnancy is one that cannot be ignored. One response has been the development of prenatal education programs for the adolescent population.

Health care providers agree that adolescents are developmentally different from older age groups and that a major key to providing useful and effective services to the adolescent population is developmental sensitivity and appropriateness. Ideally adolescent prenatal programs are designed to specifically meet the needs of the adolescents attending them. However adolescents report a gap between their needs and available services (Feldman, Hodgson, Corber, & Quinn, 1986; Hedin, Resnick, & Blum, 1980).

Studies done to assess adolescents' needs during pregnancy have tended to focus on health-related informational needs (Copeland, 1979; Degenhart-Leskowky, 1989; Giblin, Poland, & Sachs, 1986; Howard, 1985; Porterfield & Harris, 1985; Smith, Levenson, & Morrow, 1985). "Too often, prenatal education programs contain information that is relevant only to the medical aspects of pregnancy" (Giblin, Poland, & Sachs, 1987). Informational needs tend to be stressed, while other broader needs (e.g. need for emotional and social support, assistance with decision-making/problem-solving, sharing of feelings) are often ignored.

Most researchers agree that although prenatal classes alone may not necessarily reduce the risks associated with adolescent pregnancy (Slager-Earnest, Hoffman, & Beckmann, 1987), perinatal outcomes of those adolescents who attend prenatal classes are better than those of adolescents who are non-attenders. Researchers have found that adolescents who attend prenatal classes have fewer incidences of low birth weight; fewer complications of pregnancy such as C.P.D. (cephalo-pelvic disproportion), infections and anemia; increased likelihood of returning to school; and more realistic expectations of children than those adolescents who do not attend prenatal classes (Hardy, King, Shipp, & Welcher, 1981; Isberner & Wright, 1987; Lineberger, 1987; Porterfield & Harris, 1985; Slager-Earnest, et al., 1987; Timberlake, Fox, Baisch, & Goldberg, 1987; Zuckerman, Walker, Frank, & Chase, 1984). A lack of agreement among researchers exists, however, as to whether these maternal and infant outcomes are improved because of the adolescents' attendance at prenatal classes, or rather that adolescents who attend prenatal classes tend to have fewer risk factors and thus fewer complications. (Isberner & Wright, 1987; Slager-Earnest, et al., 1987; Smith, et. al., 1985; Smoke & Grace, 1988; Stahler & DuCette, 1991). Also, other variables such as prenatal care are often not controlled for (Marsh and Wirick, 1991).

In examining the benefits of prenatal education programs for adolescents, researchers have focused on the perceptions of health care providers and physiological outcome measures of effectiveness. The downfall of this approach is that health care providers tend to put "inordinate trust in professional definitions of problems, professional judgements about solutions to problems, and professional criteria of the outcomes of solutions" (Perry & Grew, 1993).

Several studies have been done which focused on the outcome measure of knowledge retention (Smith, Weinham, Johnson, Wait, & Mumford, 1985; Smoke & Grace, 1988; Timberlake, et al., 1987; Westney, Cole, & Munford, 1988). Other researchers have evaluated effectiveness of prenatal classes by measuring the incidence of maternal and postnatal complications (Howenden-Hall & Fisch, 1984; O'Brien & Anderson, 1987; Slager-Earnest, et al., 1987; Smoke & Grace, 1988). Smith, Weinman, Johnson, Wait, and Mumford (1985) looked at short-term, intermediate, and long-term benefits of prenatal education by testing for knowledge retention, observing child-rearing practices, and looking at educational and vocational activities. Jones and Mondy (1990), in their study, looked at a number of outcome variables such as number of prenatal visits, gestational age at delivery, return rate for postpartum care, contraception use, well-baby visits and return to school.

Only one informal study could be found which addressed the importance of asking adolescents to describe their experiences with prenatal classes. Moore (1984), recognizing the lack of qualitative data in evaluating prenatal classes, asked adolescent couples who had completed a series of classes to write about their labor and delivery experiences as related to the classes they had attended. The researcher cited adolescents' perceptions of and satisfaction with the labor-delivery experience, but not with the prenatal classes.

As suggested by Timberlake, Fox, Baisch, and Goldberg (1987), "past reports of prenatal education programs for pregnant teens were anecdotal and appeared within the context of program evaluation articles that emphasized health outcomes" (p.105). By focusing on the information needs of adolescents and measuring successful outcomes based on physiological parameters, researchers have failed to recognize that adolescents' perceptions of prenatal classes may differ from those of health care providers. To date, a paucity of literature exists which looks at adolescents' perceptions of and experiences with prenatal classes from their own perspective. This indicates a gap in the knowledge base available to health care providers who are interested in providing quality prenatal classes to adolescents that are perceived as useful and relevant to them.

Purpose of the Study

The aim in this study was to describe adolescents' perceptions of and experiences with prenatal classes. A qualitative exploratory-descriptive research approach was used. Eleven primary participants and one secondary participant were interviewed using a semi-structured interview format.

Research Questions

The research question that guided this study was:

What are adolescents' perceptions of and experiences with prenatal classes?

Sub-questions were:

1) What do adolescents expect to learn from prenatal classes?
2) What do adolescents perceive they learn from prenatal classes?
3) What type of teaching-learning methods and approaches do adolescents prefer with prenatal classes?
4) What changes do adolescents identify as needed in the structure and content of the prenatal classes they attended?

Significance of the Study

In the past, health care providers have tended to keep adolescents on the sidelines by preventing them from actively participating in the development of health care programs (Levin, 1989). Information gained from this study will be of value to health care professionals for planning and implementing adolescent prenatal classes. By ascertaining what adolescents like and don't like about both the content and process of prenatal classes, and by using this information in planning and implementing adolescent prenatal classes, health care professionals can more effectively provide classes to meet the needs of adolescents. If adolescents feel that prenatal classes are pertinent to their needs, class attendance may increase.

Attendance at and participation in prenatal classes may in turn improve perinatal outcomes.

The long range goal of this study was to develop an understanding of what adolescents want in prenatal classes. Attention to issues deemed important by the adolescent may influence the degree and quality of active participation in the care the adolescent takes of herself and her baby during her pregnancy. Mercer (1979) argues that if pregnant adolescents are actively involved in their own health care, they are more likely to assume responsibility for their own and their babies' well-being. Prenatal classes can also help the adolescent to learn to communicate her needs and desires to health care professionals (Altendorf & Klepacki, 1991). Pregnancy is often the adolescent's first personal and independent contact with the health care system, thus the information, skills, attitudes, and behaviors developed during this time may influence subsequent interactions with the health care system. Resultant behavior may have a profound influence on the future health of the adolescent and her child (Levenson, Smith, & Morrow, 1986).

CHAPTER II

LITERATURE REVIEW

The purpose in this literature review is to summarize and critically assess existing theoretical and research literature. A variety of areas of research are connected with the proposed research questions. Adolescence as a unique developmental stage is explored in relation to its influence on teaching adolescents. Adolescent pregnancy and its associated risks will be addressed. Research related to adolescent prenatal classes will be extensively reviewed. Data bases searched include references from 1983-1995 from MEDLINE, PSYCHLIT, CINAHL and ERIC. A manual search of the Cumulative Index to Nursing and Allied Health Literature was completed from 1978 to 1983. Literature dated earlier than 1978 was included if considered pertinent to this research. Terms searched were adolescent or adolescence and pregnancy, health education, learning needs or styles, childbirth education, prenatal and antenatal classes.

Adolescence

The very essence of adolescence depends on the way a culture defines and shapes the years between childhood and adulthood. Adolescence may be marked clearly by elaborate ceremonies called rites of passage, or be ambiguous and ill-defined. Although the period of adolescence is not recognized in all cultures (Dusek, 1991), in North America adolescence is seen as a critical period in an individual's growth and development and marks the transition from childhood to adulthood. Garbarino (1985) sees adolescence as a critical period in development because for the first time the individual possesses the cognitive skills, physical abilities and social permission to construct a workable plan for an adult life and vocation.

Current psychological and nursing literature refers to adolescence as a period of physical development, an age span, a discrete developmental stage, a sociocultural phenomenon, a way of life, a state of mind, and combinations of these views (Atwater, 1983; Coates, Peterson, & Perry, 1982; Lerner & Galambos, 1984; Rogers, 1985; van Hassell & Hersen, 1987). Rogers (1985) defines adolescence as a process of achieving "attitudes and beliefs necessary for active participation in society" (p.4). Coates, et al. (1982) define adolescence as "a transitional period between childhood and adulthood, with a biological beginning (puberty) and a social ending (the assumption of adult roles such as full-time employment or parenting" (p.63-64). This latter definition of adolescence is well supported in the literature by other researchers. Garbarino (1985) states that adolescence begins around the time when the processes of physical and sexual maturation (puberty) move into high gear and ends when young people have assumed responsibility for the major roles of adulthood (e.g. economic, sexual, political).

For most people, adolescence begins prior to the start of the teenage years (around ages 11-12) and ends after the teenage years are over (around age 20). Due to our changing social mores, however, adolescence is encompassing longer time periods as individuals spend more time in school and less time in work during the teenage years. Adolescence, then, refers to not only an age span, but also to developmental characteristics.

In the literature, adolescence is often referred to as a tumultuous period of change and growth (Blos, 1962; Erikson, 1968; van Hassell & Hersen, 1987). Hall (1904) was the first writer to focus on the psychology of adolescence and to regard adolescents as an entity unto themselves. Hall felt that the rapid growth and development of adolescence caused intrapsychic forces within the adolescent to be "at war" with each other. As a result adolescents were felt to be in a continual state of psychological conflict.

Other authors, however, have challenged this assumption of "storm and stress" in adolescence and argue that it should be regarded not in isolation to the past, but rather within the context of life span development (Bandura, 1980; Conger, 1973; Offer, 1969). The characteristics of adolescence are seen as having a history in childhood and a future in adulthood and thus are purposeful in this important period of transition. To understand adolescence, then, requires an understanding of how the biological, cognitive, emotional, psychological, and social changes of adolescence influence ongoing development.

Adolescence is a time of intense emotional and physical growth, with marked differences existing between adolescents in relation to their development, past experiences, and degree of emotional and financial independence. Several researchers suggest that generalized statements about adolescents must be interpreted with caution, as diversity exists even within the stage of adolescence (Garbarino, 1985; Katchadourian, 1990; Spector, 1979).

Developmental theorists agree that adolescence should be classified into three phases or substages of development - early, middle and late adolescence - due to differences in emotional, cognitive, and physical growth (Feldman & Elliott, 1990; Felice, 1992; Felice & Friedman, 1982; Mitchell, 1986; Proctor, 1986). The phase of early adolescence occurs at approximately 11-13 years of age and is typically characterized by pubescence, growth spurts, conservative sex roles, egocentrism, ethnocentrism, emotional immaturity, concrete thinking and present-orientation. The phase of middle adolescence occurs at approximately 14-17 years of age and is typically characterized by slowed growth, introspection, self-doubt, personal fable, imaginary audience, sense of invincibility, and for some, abstract thinking. The phase of late adolescence occurs at approximately 18-20 years of age and is typically characterized by slowed growth, sexual maturity, less egocentricity and a deepening of values (Reedy, 1991). Some researchers argue that this latter phase is a sociological phenomenon rather than a developmental one as individuals in this age group are physically able to assume an adult role but are prevented by society from so doing.

In order to understand the adolescent, it is necessary to understand the developmental aspects of adolescence. Adolescence is a period when essential developmental tasks are to be met. These tasks include increasing independence, progressing to self-sufficiency, developing relationships with same and opposite sex members, improving conceptual abilities and developing a sense of one's own self and body (Adams, 1983; Felice & Friedmen, 1982; Havighurst, 1951; Mercer, 1986; Nelms, 1981; Steinberg, 1981).

Adolescence, then, can be seen as a fascinating period of transition marked by the emergence of newfound cognitive capacities, biological maturation and emotional development amidst changing societal expectations.

Cognitive Development. Cognitive development is the way in which individuals acquire and use knowledge. Piaget (1950, 1963, 1978) describes the cognitive development of the adolescent in terms of the accommodation and assimilation of new schemes into already learned behavior. Adolescents often function cognitively at some level between the concrete operational stage of thinking characteristic of the pre-adolescent and the formal operational stage of thinking characteristic of the adult (Elkind, 1978; Martorano, 1974; McAnarney, 1983).

Adolescents in the stage of concrete operations are linear thinkers (able to consider reversibility in that they can return to the starting point of an operation in question), make decisions based on experience, focus on the here and now (able to hypothesize about concrete objects and experiences in the present), and are unable to consider the future consequences of behavior or alternatives to behavior. For the adolescent in the stage of concrete operations, time orientation is almost exclusively past or present; the future, if considered, is perceived as uncertain or idealized.

Adolescents in the stage of formal operations are able to think abstractly, consider possibilities and see long-range consequences of behavior. As adolescents strive to achieve the level of cognitive functioning typical of the stage of formal operations, they spend inordinate amounts of time 'thinking about thinking'. It is this preoccupation with thinking that leads to the narcissistic and egocentric thought patterns so typical of adolescence.

Narcissism, characterized by the love of one's own body (Woolf, 1991), is evident in the adolescent's heightened self-awareness, preoccupation with appearance and beauty, obsession with short-comings, craving for approval, concern with power and perfection and erotization of thought and fantasy (Mitchell, 1992). Egocentrism, characterized by the concern for one's own activities or needs (Woolf, 1991), is evident in the adolescent's tendency to believe that, although other people may have their own unique thoughts, perspectives and experiences, these thoughts and attentions are focused on the adolescent him/herself. This gives rise to the 'imaginary audience' where the adolescent believes that everyone is thinking about him/her and is concerned with his/her actions and thoughts; the 'personal fable' where the adolescent believes that he/she is special, unique, invulnerable, and protected from consequences; the 'time war' where the adolescent experiences a lack of direction in life as events, situations and feelings are not synchronized; and 'cognitive conceit' where the adolescent believes that he/she knows more than others (Elkind, 1984). According to Mitchell (1992), "one of the significant consequences of adolescent egocentrism occurs when the thinker fails to separate the problem from 'me' the solver of the problem" (p.24). The adolescent is unable to view a problem objectively, but rather becomes almost obsessed with the subjectivity of the situation. Failure to solve a problem is often perceived by the adolescent as failure of self. Highly egocentric adolescents will deny or minimize reality rather than deny or minimize themselves.

The shift in cognitive development from concrete operations to formal operations occurs throughout adolescence and has an influence on decision making and problem solving (McAnarney, 1983; Piaget, 1967, 1978) as well as on moral development. Although developmental theorists such as Piaget (1967) and Elkind (1981) agree that most adolescents have the capacity for cognitive maturity by age 14, almost 25% of all adults never reach the stage of formal operations (McAnarney, 1983). As well, adolescents who have attained the stage of formal operations may not use this higher level of cognitive reasoning in all situations. Adolescents may vacillate between the concrete and formal operational stages of thinking depending on the situation and circumstances. Recent research has revealed that the adolescent's "ability to reason effectively is crucially dependent on familiarity with the context about which one is reasoning" (Keating, 1990, p.64). This is consistent with other researchers' claims that even when individuals possess the ability to engage in formal operational thought, they do not always do so (Garbarino, 1985). Stressful topics and time-pressured decisions elicit less sophisticated reasoning from both adolescents and adults (Keating, 1990). This has important implications for those working with adolescents. "The adolescent may not lack the intelligence, but rather the reasoning ability to analyze and process relevant issues realistically" (McAnarney, 1983, p.41).

In summary, the cognitive development of the middle adolescent is typically characterized by concrete thinking, egocentrism and narcissism. Adolescents in this stage of development tend to be present-oriented, believe that they are the focus of others' attention, feel invulnerable and protected from consequences, lack a sense of direction in life, and feel they know more than others around them.

Social, Psychological, and Moral Development. From a social perspective, adolescence can be viewed as an important period of development during which individuals acquire the skills and attitudes that will assist them in becoming appropriately adjusted adults who can contribute meaningfully to society. Changes in social status during adolescence involve three main features: (1) achieving new and more mature relationships, (2) achieving some degree of emotional independence from parents and other adults, and (3) reconstruction of self-concept (Koch, Mancy, & Susman, 1993). Adolescence is a time when the individual begins to influence the course of his/her own development to an unprecedented degree. The adolescent has increasing opportunities to choose certain situations and environments which gives rise to both the promise and the danger of adolescence. Adolescents both select and are assigned roles and are expected to begin to act in adult-like ways in making decisions and taking responsibility for their own actions. Adolescents must begin to confront stresses and resources from which they have previously been shielded (Garbarino, 1985).

Psychologically the adolescent must come to terms with who they are as an individual, how they are different from their friends and their family, and finally how they fit into the 'big picture' of society. The adolescent must develop a sense of identity and sense of individuality, while separating psychologically from friends and family. These psychological changes occur within the context of the adolescent's social environment. According to Piaget (cited in Yoos, 1985), adolescents overcome their egocentric thought patterns through a process of "decentering" where there is a shift from a limited to a more differentiated viewpoint. This process is seen as occurring simultaneously in thought patterns and social relationships. The adolescent's focus shifts from one of a limited aspect of reality, to a broader aspect, and eventually to a whole array of different dimensions. "One of the most important avenues for this process to occur is within the context of interactions with peers" (Yoos, 1985, p.34). Elkind (1970) suggests that decentering is a necessary developmental change before an adolescent can understand the views of others or take on a sharing role in societal situations. Selman (1980) in his theory on social role-taking, describes this shift in terms of the adolescent moving from a stage of self-reflective thinking or reciprocal perspective-taking where the individual is able to begin to take the perspective of another individual, to the stage of third person or mutual perspective-taking where the individual is able to mutually coordinate and consider the perspective of self and others, and finally to the stage of in-depth and societal perspective-taking where the individual becomes aware that motives, actions, thoughts and feelings are shaped by psychological factors and are able to take an interpersonal or societal perspective.

Erikson (1968) perceives the central task of adolescence as identity formation, a process of observation and reflection in which the individual attempts to identify aptitudes and options and integrate these into a whole image of self (Holt & Johnson, 1991). The major focus of identity formation includes selecting and preparing for a major career, reevaluating moral and religious beliefs, working out a political ideology and adopting a set of societal roles (Harter, 1990). Failure to achieve identity formation results in role confusion. The adolescent experiencing role confusion has a tendency to over-identify with hero figures, cliques and peers. Adolescence is characterized by identity crises and confrontations between the pull of the peer group and the pull of parental authority. The adolescent experiments with a variety of adult roles as he/she attempts to develop a realistic sense of self. Group affiliation is one of the central preoccupations of early to mid adolescence. Peers serve the important function of helping the adolescent move from reliance on parents to preparation for the more independent functioning of adulthood. Although peers may form the adolescent's major support network, parental influence, support and style of parenting may all affect the outcome of adolescent development. According to McAnarney (1983) "the essence of adolescence is the emergence of a stable identity, a sense of self" (p.44). The adolescent's identity is forged in everyday situations such as arguments with parents, marathon telephone calls and activities with peers. Integration of conformity and individuality occurs as the adolescent's sense of identity develops (Schave & Schave, 1989).

Marcia (1967), in analyzing Erikson's theory of identity development, delineated four identity statuses or modes of dealing with the identity issue characteristic of adolescents: diffusion, foreclosure, moratorium, and achievement. Marcia also identified two processes, exploration and commitment, as underlying the identity statuses. Exploration is seen as the ability to seriously consider alternative occupational, ideological and interpersonal directions in a relatively guilt- and anxiety-free context. Commitment is seen as the ability and willingness to say "no" to some part of the array of alternatives. "In order to make a commitment, the adolescent has to feel that there is a high probability of support if he/she lets go of some of the alternatives - that support must be familial, social, or peer - ideally all three" (p. 406).

Kohlberg's theory of moral development is related to and parallels Piaget's levels of cognitive development. Kohlberg believes that as cognitive competencies increase, the individual's ability to understand increasingly complex and subtle moral issues also increases (Dusek, 1991). The highest level of moral thinking (the post-conventional level) is reached when the individual becomes increasingly capable of reasoning about various alternatives in problem-solving situations and dealing with intricate moral issues. Adolescents in the stage of concrete operations are cognitively unable to function at the post-conventional level of moral thinking.

In summary, the psychological, moral and social development of the adolescent involves the development of a sense of identity within the immediate context of peers and family and the larger context of society. Identity crises and confrontations occur as the adolescent deals with parental authority and peer pressure while attempting to establish a firm sense of self as he/she strives to become a contributing member of society.

Emotional Development. Emotional development in adolescence is often seen as a process of rebellion, stormy relations, and general unrest. However studies show that only about 20-25% of all adolescents experience this "stereotypical" picture, while the majority of adolescents experience a smoother period and seem able to cope quite well (Coleman & Hendry, 1990; Douvan & Adelson; Garbarino, 1985; Steinberg, 1990; van Hasselt & Hersen, 1987).

The adolescent's egocentric thought processes typified in the imaginary audience, personal fable and cognitive conceit, and the adolescent's need for peer acceptance and approval do, however, make the adolescent prone to experimentation and risk-taking behavior (Mitchell, 1992). Experimentation often includes sexual exploration to test new sexual feelings and capabilities. However, the cognitive development of adolescents often limits their ability to fully comprehend the consequences of their behavior. Adolescents often have the perception of being invincible and protected from the consequences of any behavior (Elkind, 1984; Jorgensen, 1981), thus they may take on adult behavior (e.g. sexual activity) while feeling immune from the consequences (e.g. pregnancy). Pregnancy is "a frightening demonstration of the fragility of the fable" (Elkind, 1984, p.385).

Biological Maturation. Pubescence refers to the approximately two year period preceding puberty when physiological changes that lead to the development of primary and secondary sex characteristics take place. Puberty refers to the point in time when an individual reaches sexual maturity and becomes capable of reproduction (Dusek, 1991). Pubescence usually occurs in late childhood and early adolescence and puberty follows thereafter. Pubescence in females occurs anytime from 8 years to 13.5 years with an average of 11.2 years of age, however there is wide variation. Changes occur throughout the body but most noticeable are breast development, broadening of the hips, accelerated linear growth, appearance of pubic and axillary hair, and the maturation of the internal reproductive system. Menarche, or the onset of menstruation, typically occurs approximately two years after the onset of pubescence.

Although the physical growth of the adolescent follows a typical pattern, diversity exists in how and when an adolescent undergoes physical maturation. Tanner (1969) devised a classification system, called the sexual maturity rating scale, based on these typical patterns of normal adolescent physical development. This scale rates the development of pubic hair and breasts in girls and pubic hair and genitals in boys on a scale from 1 to 5 and is used to assess where the adolescent falls along the continuum for the development of secondary sexual characteristics and to identify more accurately adolescents who do not fit the norms. Adolescents may be at differing stages of genital, breast, or pubic hair maturation at any one time (Jackson & Saunders, 1993).

Adolescents tend to be strongly concerned with how they match up to common behavioral and physical stereotypes. They also compare themselves to their peers who may or may not be maturing at the same rate (Osborne, 1984; Simmons & Blyth, 1987). The adolescent must cope with these rapid physical changes that are occurring and must somehow respond to form an integrated sense of self. The physical self is influenced by the psychosocial context surrounding the adolescent. The behavioral and emotional reactions of the adolescent, peers, parents and others adults affects the way each adolescent experiences puberty, especially when the onset of puberty is relatively early or late. Body image (Salter, 1988), self-esteem (Coates, Peterson, & Perry, 1982; Miller, 1987), and relationships with others (Mitchell, 1986) affects the adolescent's view of the world.

In negotiating the transition between childhood and adulthood, adolescents face a number of developmental challenges, many of which involve reproductive events. The gap between biological maturation of sexuality and the social acceptance of its expression is a source of many of the problems associated with adolescent sexuality. To understand the adolescent experience, one must understand the cognitive, social, psychological, moral, and biological development the adolescent is undergoing and the context in which this development is occurring. Health care providers, then, must focus on the wholeness of the adolescent in order to understand the adolescent's perspective and perceptions while acknowledging the context and circumstances surrounding the individual. This is especially relevant to health care professionals providing health education to adolescents.

Health Education with Adolescents

Health education is a "biphasic process through which individuals voluntarily adopt health behaviors" (Kolbe, Iverson, Kreater, Hochbaum, & Christensen, 1981, p.131). The two phases of health education are the giving and receiving of information and the change of behavior. Paperny and Starn (1989) point out that knowledge gains alone may have little effect on actual behavior. Thus health education programs that emphasize dissemination of information and measure effectiveness based on knowledge gains alone may be inappropriate and even futile in promoting behavior change.

Goldstein (1981) argues that health educators should focus on social learning, as well as cognitive learning. Social learning is said to occur when "information, guidance and opportunity to try new actions leads to a reshaping of personal reality, beliefs, or values" (p.746). Lewis (1991) identified the three components of health education curricula that have been the most successful in influencing adolescent behavior as: role playing where reenactment is practiced, peer coaching and feedback and discussion of real-life situations generated by the adolescents themselves. Peterson (1982) supports the idea of social learning and stresses that it is adolescents' lack of experience that leads them to make poor judgements and behave unwisely in risky situations. "If experience is the key factor, then the appropriate focus of interventions for adolescents is to give them the information, skills, and practice necessary to behave more wisely in a manner consistent with their values and needs" (p.16).

Health care professionals, especially nurses, by virtue of their positions in the health care system, often have the opportunity to interact with adolescents at a time when they may be particularly conscious of their health and thus possibly interested in and responsive to health education. Reeder, Mastroianne, & Martin (1983) emphasize that client education is a major component of the professional nurse's role. The literature, however, indicates that the quality, consistency and effectiveness of teaching efforts of health care professionals with the adolescent population is questionable. Many health education programs for adolescents consist of an outline and delivery of specific content that is often presented by lecture, pamphlet, or other audio or visual means (Sullivan, 1984). Few programs are based on any comprehensive conceptualization of instruction. Instructional objectives are often vaguely stated, little or no attention is given to assessment of the diverse learning needs of the particular age group, instructional design is seldom specified and may not be geared to the developmental characteristics of the learners, and evaluation, if conducted at all, is unsystematic and subjective.

Problems in designing developmentally appropriate health education programs for adolescents may be traced to the professional preparation programs of the health practitioner. Traditionally, nurses were prepared to perform caretaking functions in a therapeutically oriented system. More recently, nurses are commonly introduced to health teaching as a function of their roles, but preparation for them to assume this responsibility has not been extensive. Thus, many nurses may enter the health care system lacking adequate knowledge and skills to assume responsibility for health education, especially with a unique group of learners like adolescents.

Health educators need to be knowledgeable about the process of teaching-learning and the characteristics of the learners. It is well documented in the education literature that a needs assessment of learners is the first step in planning effective education programs. Thus it is essential that health educators working with the adolescent population know and understand their unique developmental characteristics. Levin (1989) argues that adolescents are more likely to respond to educational approaches that provide opportunities for learning if learning approaches fit the developmental level.

Pender (1987) emphasizes the importance of the learning environment as it may pose a barrier to learning and/or contain obstacles that prevent learners from effectively carrying out what they have been taught. The teacher, or health educator, forms a crucial part of the learning environment. The importance of teacher interpersonal skill as a crucial variable in instructional effectiveness is strongly supported in the general education literature (Aspy & Roebuck, 1977; Combs, 1974; Patterson, 1977; Redman, 1993; Whitman, Graham, Gleit, & Boyd, 1992). In fact, some literature suggests that poor interpersonal functioning by teachers can nullify the effects of health instruction (Kolbe, et al., 1981; Whitman, et al., 1992).

Teaching and learning principles when applied to adolescents should be based on the developmental and cognitive processes of the learner. Only some adolescents will have reached the stage of formal operations and developed the ability to think abstractly and reason deductively (Rankin & Stallings, 1990). Adolescents who are still in the stage of concrete operations will have difficulty understanding abstract concepts, cause and effect relationships, and future orientation. Teaching efforts should focus on present needs and concerns. Adolescents are often egocentric and may want and need to explore personal issues before being able to focus on the needs of others (e.g. their babies). Socially, adolescents are struggling to develop identity. This process often occurs within the context of relationships with peers. Adolescents' tendency to rely upon peers for support, information, and affirmation makes small group discussions conducive for learning.

Teaching strategies are also important to consider when presenting health education to adolescents. Studies show that most adolescents prefer active participation in learning and that teaching strategies such as live demonstrations and games may enhance retention of material more so than strategies in which the learner is more passive (Sorcinelli & Sorcinelli, 1987). Catrone and Sadler (1984) suggest that many adolescents may be struggling with issues of gaining independence versus dependence and thus may have a conflict between activity and passivity during learning. Blos (1962) argues that adolescents attempt to resolve this conflict by assuming an active role in learning and thereby minimizing conflict.

Researchers have found that adolescents learn best through multiple pathways (Reedy, 1991). Visual aids, small group or one-on-one discussion, and hands-on participation are effective techniques for this age group. Role-playing and play acting fit with the adolescent's tendency towards magical thinking and assist with extrapolating facts to their own lives. Adolescents often learn best through trial and error, thus demonstration and return demonstration with hands-on materials are often effective.

Health education programs, such as prenatal education classes, must incorporate these developmentally appropriate teaching-learning strategies in order to be sensitive to the needs of the adolescent population. By providing health education programs that are sensitive to the needs of the adolescent population, it is hoped that client satisfaction and motivation will be enhanced and use of health-care resources will be optimized.

Adolescence can be an ideal time for health education and health promotion. Adolescence is a time of rapid change in psychological, physical, and social status. This period of rapid change can provide a window of opportunity for changing adolescents' beliefs and perceptions about their health behaviors, attitudes, and values (Koch, et. al, 1993).

Adolescent Pregnancy

Although the pregnancy rate for late adolescents is declining, the pregnancy rate for early and middle adolescents is increasing (Wadhera & Strachan, 1991). In 1989 in Canada, more than 40,000 adolescents under 20 years of age became pregnant. Approximately 50% of these adolescents gave birth, approximately 40% obtained therapeutic abortions, and the remainder aborted spontaneously (Wadhera & Strachan, 1991). The majority of adolescents who keep their pregnancies also keep their babies (Alan Guttmacher Institute, 1981). Less then 5% of adolescent mothers place their infants for adoption.

Antecedents to Adolescent Pregnancy. Pregnancy is the end point in a sequence of events that includes engaging in sexual intercourse and failure to practice effective contraception. From the research, however, it appears that there are many complex, interwoven variables that are associated with the increase in pregnancy among adolescents. These variables include physical factors such as sexual maturation occurring at an earlier age than was typical in the past (Anastasiow, 1983; McAnarney & Hendee, 1989; Simkins, 1984) and early initiation of sexual activity (Hayes, 1987; Stark, 1986; Westney, et al., 1988); cognitive factors such as a level of cognitive functioning which allows the adolescent to engage in magical thinking and feelings of immunity from the consequences of behavior, an inability to acknowledge their own sexuality and that they are sexually active (Hayes, 1987), a lack of birth control knowledge or refusal to consistently utilize birth control (Dryfoos, 1982; McAnarney & Hendee, 1989; Roosa, 1983; Stark, 1986) and difficulty with decision-making (Hayes, 1987); social factors such as family dysfunction, lack of parental support, poverty, experimentation with adult behaviors and seeking of peer acceptance (Altendorf & Klepacki, 1991; Bolton, 1980; Chilman, 1980; Russel, 1982); and psychological factors such as poor self-esteem, feelings of hopelessness and lack of assertiveness (Chilman, 1980; Cobliner, 1981; Patterson, 1990).

Many researchers argue that the changing patterns of adolescent sexual behavior are the inevitable consequence of broader social trends including the widespread use of contraception, feminism, changing patterns of marriage, family structure, education and work patterns (Hayes, 1987). The early initiation of sexual activity has been linked with other risk-taking behaviors such as alcohol and/or drug use/abuse (Hechtman, 1989; Janoco, Janoco, St. Onge, VanOosten, & Meininger 1992; Zuckerman, Hingson, Alpert, Dooling, & Kayne, 1983).

Phipps-Yonas (1980) in reviewing the attempts of researchers to identify the causes of adolescent pregnancy, concluded that "the overriding message of their findings has been that there is no unique psychological profile common to most, much less all, pregnant adolescents" (p.407). The only consistent commonality that could be found was that all pregnant adolescents had engaged in sexual intercourse at least once.

Consequences of Adolescent Pregnancy. Adolescence and pregnancy are both regarded as periods of transition. When these two periods are experienced simultaneously, the developmental tasks of adolescence may conflict with the developmental tasks of pregnancy and crisis may result (Catrone & Sadler, 1984; Leppert, 1984). This crisis can negatively impact the adolescent and subsequently her fetus/child. Pregnancy and childbirth can force the adolescent into an adult role before the tasks of adolescence are accomplished. Adolescence becomes postponed and the infant may be left with an unfinished adult for a parent (Podgurski, 1993). Marcia (1967) states that the adolescent who makes a premature commitment to continue with her pregnancy and keep her baby without investigating other options is forced to remain in a stage of foreclosure. The adolescent in foreclosure limits her opportunities to try out other roles and thus fails to resolve her identify crises as adolescent and mother-to-be.

Once an adolescent becomes pregnant, a series of sequelae often occur that warrant intervention: inadequate prenatal care (Elster, 1984; Makinson, 1985; Ryan, Sweeney, & Solola, 1980; Stevens-Simon & White, 1991), truncated education and limited occupational opportunities (Carey, McCann-Sanford, & Davidson, 1981; Cooley & Unger, 1991; Corbett & Meyer, 1987; Frager, 1991; Friedman & Phillips, 1981; Kelly, 1988; Stevens-Simon & White, 1991), social isolation (Parks & Arndt, 1990), repeat pregnancies (Hayes, 1987; Podgurski, 1993), and long-term dependency on welfare (Nord, Moore, Morrison, Brown, & Myers, 1992). Kelly (1988) states that the short and long term consequences of adolescent pregnancy fall under four areas of concern: (1) health concerns including maternal complications such as pregnancy-induced hypertension and anemia, and neonatal complications such as prematurity, low birth weight, and increased neonatal and infant mortality; (2) education concerns including school drop-out and limited employment opportunities; (3) economic concerns such as low paying jobs, unemployment, poverty, and reliance on welfare; and (4) social concerns such as loneliness and social isolation.

In the past researchers felt that age alone was a risk factor that led to the many consequences associated with adolescent pregnancy. Researchers now agree that factors such as low socioeconomic status, poor education, certain ethnic races, lack of prenatal care, substance abuse and inadequate nutrition are felt to be better predictors of perinatal outcome than age alone (Corbett & Meyer, 1987; Makinson, 1985; Mansfield, 1987; Stevens-Simon & Beach, 1992; Stevens-Simon & White, 1991). In fact, once socioeconomic background has been accounted for, perinatal complications in adolescents are most frequently due to inadequate prenatal care (Elster, 1984; Makinson, 1985; Ryan, Sweeney, & Solola, 1980; Stevens-Simon & White, 1991). Complications associated with inadequate prenatal care in adolescents include premature labor, anemia, increased maternal/neonatal mortality and morbidity, and higher incidences of low-birth weight infants (Mansfield, 1987).

Adolescents who do not seek prenatal care are also found to be at higher risk of alcohol and drug use/abuse than those adolescents who do seek prenatal care (Marques & McKnight, 1991). Although research findings reveal that the prevalence and adverse effects of cigarette smoking and illicit drug and alcohol use increase with maternal age (Zuckerman, Hingson, Alpert, Dooling, & Kayne, 1983) these risk factors are also present in some adolescents. Research findings reveal that approximately 20% of pregnant adolescents who seek prenatal care have a high risk of drug use (defined as someone who smokes cigarettes and/or reports only infrequent use of other psychoactive substances, who stopped using upon learning they were pregnant, or who may be living with or be friends with a known drug abuser having a significant emotional connection to the patient). Those who do not attend prenatal clinics are generally at higher risk of drug abuse. It is difficult to obtain statistics about pregnant adolescents who are known abusers and are actively using drugs during their pregnancy as they tend to not seek prenatal care and/or deny the use of drugs (Marques & McKnight, 1991).

Stevens-Simon and Beach (1992) state that pregnant adolescents who obtain adequate prenatal care do not appear to be at higher than average risk for adverse pregnancy outcomes, with the exception of preterm delivery. Prenatal care is defined as a complex service and includes serial assessment of maternal and fetal well-being, patient education and evaluation of physical and social conditions requiring special treatment. Stevens-Simon and Beach (1992) argue that the "caring" component of prenatal care may be an important part of improving outcome, especially with the pregnant adolescent who may be physically healthy but psychosocially stressed. Sources of stress in the pregnant adolescent may include concern about school, health and body image; insecurity about her new role; restricted time for self; unsolicited and unwanted advice; criticism and negative comments from others; and social isolation (Panzarine, 1986; Schinke, 1984). Prenatal classes can be an effective avenue to address the educational component of prenatal care, provide the caring that is needed by many adolescents, and hopefully alleviate some of the short and long term consequences associated with adolescent pregnancy.

Prenatal Classes with Adolescents

Prenatal education formally began in the early 1900s in England. Early goals were to promote physical health during pregnancy and help towards an easier labor. According to Randall (1949), "harmonious interaction of the mind and body" was seen as essential for childbirth (cited in Williams & Booth, 1980). In the 1930s, Dr. Dick-Read influenced prenatal education by introducing the idea that birth was a natural physiological function and should not cause pain in the normal woman. He described the fear-tension-pain syndrome and stressed that childbirth could be rendered painless through a combination of education, exercises and relaxation (Hetherington, 1990).

In the early 1950s, Lamaze introduced psychoprophylactic breathing exercises designed to give the woman in labor "control" over her pain. The Lamaze method was based on two principles designed to combat and eliminate pain in the laboring woman: education and the development of new conditioned reflexes to overcome the defensive reflexes of pain and tension.

There are many methods of childbirth preparation available. These include the Read method, Lamaze, Kitzinger's psychosexual method, and Bradley's husband-coached childbirth. Almost all of the childbirth preparation classes include several common elements provided to assist the parent(s) to prepare for the birth of the baby. These elements are: (1) information about what happens physically and emotionally during pregnancy, labor-delivery and postpartum; (2) skill training in relaxation and breathing techniques; and (3) providing/receiving support/coaching during the labor-delivery process (Broome & Koehler, 1986).

The underlying principle of prenatal classes is that the woman can use her intellect and follow certain prescribed methods to control her body during childbirth. In more recent years, prenatal classes have expanded on this concept and focused on the physical, psychological and social needs of the pregnant woman and her support system. The emphasis has shifted from a focus on preparation for the labor/delivery experience to a more encompassing focus of pregnancy, birth and the postpartum experience.

As prenatal classes were introduced into practice, studies were done to assess their impact on physical and psychological outcomes. Many of these studies were flawed, however, as control groups were rarely used (Hetherington, 1990). It is unclear whether the positive outcomes were related to the prenatal classes or to the specific characteristics of those women who attended the classes. One important outcome of these studies, however, was that in examining the demographics of women who attended prenatal classes, it became evident that many women who could benefit from the classes were in fact not attending. Studies done to compare characteristics of attenders vs non-attenders at prenatal classes showed that cultural, developmental, social, financial, and/or transportation barriers were the reasons most often cited by health professionals and non-attenders. Because of these concerns, "specialized" prenatal classes were developed to meet the unique needs of particular groups of women.

Prenatal classes offered specifically to the adolescent population are one example of specialized prenatal classes. Ideally, these classes will be sensitive to and geared to the unique developmental, social and emotional needs of the adolescent. Most of the research literature on prenatal classes for adolescents has focused on two main areas: information needs and outcomes.

A variety of studies have been done to identify the information needs of adolescents during and after pregnancy. Several researchers have used questionnaires to survey adolescents about their health education needs during pregnancy (Giblin, Poland, & Sachs, 1986; Levenson, Smith, & Morrow, 1986; Porterfield & Harris, 1985; Smith, Levenson, & Morrow, 1985) and after delivery (Davis, Brucker, & Macmullen, 1988; Degenhart-Leskosky, 1989; Howard, 1985). The main focus of these studies was on identifying the information and knowledge adolescents perceived they would want to learn in prenatal classes. Copeland (1979) recognized that adolescents may also have ideas related not only to information needs, but also to how content is presented in prenatal classes. Using a combination of open-ended questions and a Likert-type questionnaire, Copeland interviewed 15 pregnant adolescents about information needs and preferred teaching approach or method. Results indicate that adolescents wanted information about self-oriented topics (understanding bodily changes and labor/delivery) and most preferred group discussion. The use of a questionnaire may be criticized, however, as the adolescents may have been inclined to identify what they thought they should learn in prenatal classes rather than what they would like to learn. The researcher does not specify if the adolescents had attended or were attending prenatal classes. Also the adolescents' perceptions of the experience are not discussed. Bachman (1993) administered a questionnaire to 121 pregnant and parenting grade school and high school students who had participated in a health class in order to elicit information about self-described learning needs and preferences for teaching methods. The health class contained information on prenatal, postnatal, sexuality and decision-making issues. Results indicated that adolescents were most interested in learning about infant illnesses and complications during pregnancy and childbirth. Preferred teaching strategies included hospital visits, parties, videos, films, records, and games. Participants varied in age from 12 to 20 years and were grouped in small classes based on the month of pregnancy. Each group attended different health classes (e.g. adolescents in early pregnancy attended classes related to healthy pregnancy, adolescents in the postpartum period attended classes about making better reproductive choices). Results of the study do not specify if the identified learning needs and teaching strategies pertain only to participants at a certain stage of pregnancy/parenthood.

Many researchers have attempted to look at outcome measures with adolescent prenatal classes. Many of these studies have looked at prenatal classes as part of comprehensive adolescent pregnancy programs. Evaluating programs in an entirety poses difficulties in discerning which aspects of the program provide the results. Marsh and Wirick (1991) refer to this as the "'black box' approach to evaluation where a program is treated as a single unitary force and no effort is made to sort out specific 'active ingredients' or aspects of the program that are particularly important" (p.50). According to Stahler and DuCette (1991), the impact of adolescent pregnancy programs is to a large extent unknown.

Experimental studies have been done in an attempt to measure effectiveness of prenatal classes from the perspective of health care providers. Outcome measures include knowledge retention (Smith, Weinman, Johnson, Wait, & Mumford, 1985; Smoke & Grace, 1988; Timberlake, Fox, Baisch, & Goldberg, 1987; Westney, Cole, & Munford, 1988), and incidence of maternal, fetal, and neonatal complications

(Howenden-Hall & Fisch, 1984; O'Brien & Anderson, 1987; Slager-Earnest, Hoffman, & Beckmann, 1987; Smoke & Grace, 1988).

Qualitative research about adolescent prenatal classes is lacking. Only one report based on a qualitative evaluation could be found in the literature. Moore (1984), in her discussion about prenatal classes at a clinic in North Carolina, states that she elicits qualitative data by asking adolescents to write about their prenatal, labor and delivery experiences as part of a class evaluation. Results cited focused on the adolescents' perceptions of their labor-delivery experience rather than on the prenatal classes. No studies could be found in the literature which focused on adolescents' perceptions of and experiences with prenatal classes.

In summary, research on adolescent' prenatal classes has tended to focus on identifying information needs and measuring outcome variables. A paucity of research exists which focuses on describing adolescents' perceptions of prenatal classes and identifying preferred teaching-learning methods and approaches. This research study will attempt to address this gap in research.

CHAPTER III

METHOD

Rationale for Qualitative Methodology

The purpose in this study was to explore and describe adolescents' perceptions of and experiences with prenatal classes. A qualitative approach was appropriate for this study as very little is known about the perceptions of adolescents regarding prenatal classes and as is evident from the literature, there has been no comprehensive, systematic research done on this subject (Brink & Wood, 1989). Qualitative methods are aimed at discovering meaning in context and are necessary to develop knowledge for nursing practice. In a practice discipline such as nursing, inquiry must begin with identifying and isolating relevant factors, rather than trying to explain or predict imposed variables (Diers, 1979).

Research Design

In this study, an exploratory-descriptive design was used. The researcher collected, described and analyzed data in order to provide insight into human behavior and to determine the meaning adolescents attach to their behavior. Ethnographic interviews were conducted and data analyzed using content analysis. Description, with identification of commonalities across interviews, was an initial step in developing an understanding of behaviors that can facilitate health care professionals' care for adolescent clients. This information will enable nurses to recognize and evaluate the needs of adolescents and assist them in the development of strategies leading to quality human experience (Aamodt, 1989).

The Sample

A purposive convenience sample of adolescents who volunteered to be interviewed was obtained from two agencies that offered adolescent prenatal classes (called Teen Class I and Teen Class II) and from the postpartum unit of a tertiary care hospital. These participants were then screened using the inclusion and exclusion criteria and if suitable were selected for the study. This non-random selection of participants was important to facilitate the quality of the information obtained (LeCompte & Goetz, 1982).

As concepts and categories requiring validation emerged from the data and coding, later participants were selected on the basis of any additional information that they could provide. The ideas presented by the participants formed the basis of the description, as well as "generating a plan for recognizing and evaluating the needs of individuals and groups of individuals" (Aamodt, 1989, p.38). This qualitative research method allowed the researcher to value the uniqueness of each individual while seeking out commonalities within the study group (Thorne, 1991).

Recruitment of the Sample

Eleven participants were recruited using a variety of methods. First participants were recruited from two different agencies that offered adolescent prenatal classes. Two different agencies were chosen to ascertain if the descriptions of the participants were typical of adolescents who attended prenatal classes, or typical of adolescents who attended prenatal classes at a particular agency. Eight primary participants who met the inclusion criteria and one secondary participant were found through this method. Four of these participants attended prenatal classes only at Teen Class I, two participants attended prenatal classes only at Teen Class II, two participants attended prenatal classes at both Teen Class I and II, and one participant attended prenatal classes at Teen Class II and General Prenatal (Appendix F).

Second, participants were sought from the postpartum unit of a large tertiary care hospital. Three primary participants who met the inclusion criteria were found through this method.

Selection criteria for an participant's inclusion in this study were:

1. Adolescent females (age 14 - 17 years of age).
2. Could speak and read English.
3. Had attended a minimum of three prenatal classes during their pregnancy.
4. Were willing to talk about and articulate their experiences.
5. Were between two and twelve weeks postpartum.

Exclusion criteria was any previous pregnancy of over 16 weeks gestation.

The age limit was enforced as it was thought that the descriptions of prenatal classes by middle adolescents might differ from those given by early and late adolescents. Attendance at a minimum of three prenatal classes was enforced as it was felt that this would provide adequate exposure to and experience with the classes to enable the participants to describe their experiences. In this study participants had all attended at least four prenatal classes. Interviews took place between two and twelve weeks postpartum so that participants had gone through the labor-delivery and early postpartum experience, yet were not too far removed from the prenatal class experience and thus able to remember and articulate the experience.

One secondary participant was selected to verify the descriptors used by the researcher based on the data related to the prenatal classes. This participant was more than 12 weeks postpartum but was interested in participating in the study. In addition, one primary participant also verified the descriptors.

Sample Size

The sample size for this research study was not pre-determined because in qualitative research the data needed and thus the sample size varies with the aim of the study and the breadth of the inquiry into the subject area (Agar, 1986). The sample size is a function of the qualities of the participants and of the interviewer's interviewing skills because these factors influence the quality of the data (Morse, 1986). After the first three interviews were completed, content analysis was done and eight categories describing the participants' perceptions of and experiences with prenatal classes were developed. The principle of saturation was followed in that interviewing ceased when additional participants did not provide any new information beyond that already obtained by the researcher. As well, the researcher decided that the sample size was adequate when the data obtained was sufficiently detailed to enable the researcher to answer the research questions. Participants were recruited on an ongoing basis and data were analyzed concurrently, so that the researcher knew when the categories appeared to be saturated (Morse, 1986). Eleven primary participants and one secondary participant comprised the participants in this research study.

Characteristics of the Participants

Biographical information was collected from each participant in order to further describe the research sample and to begin to understand the context of the participant's world (Appendix F). Seven of the participants were 17 years of age, with one participant being 14, two being 15, and two being 16. This was the first pregnancy for eleven of the participants. One of the participants had had a previous therapeutic abortion at 9 weeks gestation. Two participants were Metis.

One participant had completed grade 11, three had completed grade 10, six had completed grade 9, and two had completed grade 8. Seven of the twelve participants were currently attending school when interviewed. Of the five who were not attending school, all had plans to return to school in the next few months.

Most of the participants were currently living with their parents, while three were living with their boyfriends, one was living with her aunt and uncle, and two were living alone. All of the participants were single and had never been married at the time of the interview. Two of the participants planned to marry their boyfriends in the next few months.

All participants delivered within three weeks of their due date. Babies' weights ranged from 4 lbs. 1 ounce to 8 lbs. 12 ounces. Two babies had a brief stay (under 24 hours) in the Intensive Care Nursery for observation: one for possible meconium aspiration and the other for investigation of a cyst on its back. All participants kept their babies. Two participants were still breastfeeding their babies at the time of the interview.

Characteristics of the Classes

Teen Class I: Prenatal classes were offered as one aspect of a school-counselling program for pregnant and/or parenting female adolescents (up to age 18). Classes were held on-site in a school classroom during a 50 minute time block prior to lunch. Classes were taught by a community health nurse and were free of charge. On-site day care was available for a subsidized fee.

Teen Class II: Prenatal classes were offered for pregnant teens at a tertiary care hospital. Classes were held in a basement classroom from 4:30 - 6:30 p.m. on a week day. Classes were taught by two health care providers (social workers, RN's). A meal was provided part way through the class. Cost of the classes was $20 (with subsidy available as needed).

General Prenatal: This category included all other prenatal classes that participants attended. Classes were offered to pregnant women and their partners at a variety of sites (community health centres, hospital, community hall) and were held in the evening on a weekday. Classes were taught mainly by nurses. Fees varied depending on the site (average cost of session was $30; fee could be waived and/or subsidized under special circumstances).

Data Collection

Interview Process

The interview method was appropriate for data collection in this type of study as interviews allowed for self report of participants' perceptions and experiences, flexibility in question order, and clarification of questions as needed (Brink & Wood, 1989). These considerations were relevant as participants had varied educational levels and likely varied reading levels as well as differing comprehension and cognitive abilities. Explanations and clarification were given as needed to ensure that the participants understood the topic, questions and terms. Participants did not seem to experience difficulty answering the questions or expressing their opinion to the researcher.

The researcher had met all participants prior to the scheduled interview. With participants accessed at the prenatal classes (Teen Class I and II), the researcher had attended a prenatal class at each site, explained the study, and handed out the Information Letter and Permission to Contact Form (Appendix A). Although the intent of the researcher was to begin to establish rapport with potential participants at this time, the visit to each prenatal class was brief (approximately five minutes), occurred within the large class setting, and the time between the visit to the prenatal class and the interview averaged about eight weeks, thus there was little opportunity to establish rapport.

With participants accessed on the postpartum unit, the researcher visited the potential participant while in hospital, explained the study, and handed out the Information Letter and Permission to Contact Form (Appendix B). The visit to each participant at the hospital lasted between five and ten minutes, was on an individual basis, and occurred on average three weeks prior to the interview, thus the researcher was provided with the opportunity to establish rapport. The researcher's perception is that although this difference did not seem to influence interviews overall, having met with the participant individually and closer to the time of the interview made the beginning of the interviews less awkward and participants tended to share more openly earlier in the interview.

At the beginning of the interview with each participant, the study was again explained to the participants and informed consent was obtained (Appendix C). Biographical data about each participant was then collected (Appendix D). Although the data serves to describe the participants in greater detail for the readers of this study, it is important to note that this information was not deemed relevant to the developing categories unless it emerged from the data during data analysis (Glaser, 1978). Collecting biographical information at the beginning of the interview served to 'break the ice' and enabled both the interviewer and participant to relax into the interview milieu.

Interviews were semi-structured using open-ended questions (Appendix E). A combination of structured and unstructured questions were used in order to provide consistency to the data (Brink & Wood, 1989). As no suitable instrument for the attainment of adolescents' perceptions of and experiences with prenatal classes was available, the researcher developed an interview schedule. Relevant information from the literature and consultation with health care professionals and adolescents were used as the basis for development of appropriate questions, thus providing content validity for the interview guide.

An informal, friendly, but purposive atmosphere was maintained throughout the interviews to minimize participants' awkwardness with the interview situation (Agar, 1986; Spradley, 1979). The researcher made a conscious effort to allow participants to voice their thoughts and feelings without interruption. Prompts were used especially at the beginning of interviews, in order to add depth and richness to the data and to ensure that all aspects of the experience with prenatal classes were covered. As each interview progressed, fewer prompts were necessary with all participants.

Participants seemed to understand all questions asked with one exception. The first two participants interviewed did not seem to understand what the researcher meant by "how do you learn best?". The researcher thus changed this question for subsequent interviews to "think of your very favorite class you've ever been in, how do you like to learn best? Do you like to be one-on-one with the teacher, do you like to work in small groups with other people, do you like to go off on your own and read about things? What's your best way to learn?" Participants had no other difficulty with the other questions that were asked. Several prompting questions were added after the first three interviews were analyzed (Appendix G) in order to clarify and verify data collected from those participants previously interviewed. These additional prompting questions were introduced only after the participants had spontaneously answered the questions in the interview guide. All questions seemed to make sense to the participants and elicited the information asked for by the researcher. Thus face validity was established for the interview guide.

Interviews were between 45 minutes and one and a half hours in length, with most interviews lasting approximately one hour. This time period is typical of interview length in other research studies with adolescents, as well as consistent with what adolescents are believed to be able to handle (Faux, Walsh, & Deatrick, 1988). Interview length seemed appropriate for the participants. As all necessary information was obtained at the first interview, the researcher decided that second interviews were unnecessary.

All interviews were tape-recorded. Field notes were recorded immediately following each interview. These included the researcher's observations about characteristics of the setting, nonverbal communication occurring during the interview, and interruptions or other factors that were felt to influence the interview. The field notes also reflected the researcher's thoughts and interpretations about the interview and were used to guide future interviews. Following each interview, interviews were transcribed verbatim by a typist and non-verbal observations from field notes were added and placed in brackets. During data analysis, the field notes were used to assist the researcher to understand the context in which the interview took place (Field & Morse, 1985).

Interview Setting

Participants were interviewed once in the postpartum period when their babies were between two and twelve weeks of age. Six participants chose to be interviewed at their home, while six participants chose to be interviewed at their school. By allowing participants to choose the location of interactions, they were able to gain some control early in the relationship. According to Mitchell (1986), "adolescents have the capacity to make choices and they desire to exert this capacity" (p.167). Incorporating control and choice when working with adolescents is thought to be crucial to successful interactions (Green, 1979; Jordan & Kelfer, 1983; Levenson, Morrow, & Smith, 1984).

Each participant was interviewed alone at the request of the researcher in order to facilitate confidentiality, encourage full expression of ideas, and minimize peer or parental influences on responses to questions (Hedin, Wolfe, & Areneson, 1977; Morse, 1986). One participant's father was at home when the researcher arrived to conduct the interview. The researcher waited until the participant's father left prior to commencing the interview. The participant later expressed gratitude to the researcher for not asking her questions while her father was in the home. Of the six participants who were interviewed at home, two participants' babies were in the same room as the participant, and four participants' babies were in a nearby room at the time of the interview. One baby woke up during the interview; the researcher stopped the interview until the participant had resettled her baby. As the disruption occurred during the collection of the biographical data, it was not thought to interrupt the flow of the interview. The proximity of the other babies was not felt to be disruptive to the interview process.

Data Analysis

Data analysis occurred simultaneously with data collection. Twelve interviews with eleven primary participants and one secondary participant were completed by the researcher over a six month period. Interviews were tape-recorded and transcribed verbatim by a typist.

Content analysis, based on the framework suggested by Polit and Hungler (1985), was done manually with each transcription in order to structure the data obtained from the interviews. Each participant's transcript was colour-coded. In the initial stage of analysis the researcher read each transcript and searched for themes. According to Polit and Hungler (1985), the search for themes involves a search for commonalities among people and for differences across subgroups. An example of a theme in this research study was 'not feeling prepared'. The researcher then reviewed each transcript line by line and identified codes or units of analysis. Initially, the codes or units of analysis closely resembled the questions in the interview guide, for example 'information learners wanted to know when they went to prenatal classes', 'information learners felt they learned about in prenatal classes', 'information learners would have liked to have learned about in prenatal classes'. These codes were then arranged into categories by commonalities in subject matter, for example descriptions about themselves or their babies, descriptions about prenatal, labor/delivery or the postpartum periods, and descriptions related to process or content. The data was then surveyed for phrases, sentences, or anecdotes central to each category so that adequate descriptions of the categories were attained. The researcher used a cut-and-paste approach to organize data. Excerpts from transcripts were cut out and placed in a large binder with sections for each of the identified categories. Descriptors for each category were then compared within interviews for each participant as well as compared across interviews with other participants. This method of constant comparison involved constantly comparing descriptions elicited from the data with data obtained earlier in the data collection so that commonalities and variations can be determined (Polit & Hungler, 1991). As the interviews progressed, the researcher was able to use the data obtained from previous interviews to guide subsequent interviews. In this way the researcher was able to validate and clarify information as data collection and analysis proceeded. The important categories describing adolescents' perceptions of and experiences with prenatal classes became evident after four interviews.

Theoretical notes, or memos were written by the researcher during the data analysis procedures and upon reflection of fieldnotes. These notes recorded the researcher's thoughts and ideas about the data and categories and helped the researcher identify important information not clearly spelled out in the data (Field & Morse, 1985). Descriptors for each category were noted in the margin as the interviews progressed.

Methodological Rigor

The reliability and validity determines value and credibility of any study (Brink & Wood, 1989; Field & Morse, 1985). Criteria outlined by Guba and Lincoln (1981) and adapted by Sandelowski (1986) were used to assess rigor in this qualitative research study and to establish trustworthiness of the data. These four criteria include credibility, fittingness, auditability, and confirmability.

Credibility

Credibility, or truth value, is the degree to which findings actually represent the reality of the phenomenon being studied (Sandelowski, 1986). Several strategies were used by the researcher to enhance credibility. First, the researcher met with participants prior to conducting the interview. The location of the interviews was determined jointly by the participant and the researcher. Interviews were conducted in a private room so that there were no interruptions and conversations would not be overheard. Participants were interviewed without peers or parents present. All of these techniques aided in the establishment of rapport and the development of trust with each participant, which in turn added to credibility (Field & Morse, 1985).

Secondly, participants were interviewed from a variety of agencies to help ensure that their responses were not context-dependent. Participants were assured that the researcher was not directly involved in the prenatal classes at any of the sites. It is assumed that participants were able to talk accurately about their experiences and that their responses were trustworthy as there was no benefit to participants if they lied.

Thirdly, participants were presented with the possibility that a second interview would be held if the participant and/or researcher believed that one interview was not sufficient to cover the questions in the interview guide or if the researcher felt it was necessary to verify earlier responses and thus add depth to previously collected data.

Lastly, the findings derived from the data were given to one primary participant and one secondary participant to see if the researcher's perceptions of the data fitted with the participants' experiences. In both cases, the participants agreed with the descriptors obtained for the categories.

Pre-existing biases of the researcher have the potential to influence the credibility of the results (Guba & Lincoln, 1981). For this study, the researcher had no specific expectations of what participants would say about prenatal classes, nor any specific hypotheses to prove. The researcher also had no biases from reading previous research, as the research on this topic is lacking. Thus pre-existing biases which could invalidate the results of this study were not deemed to be a problem.

Fittingness

Fittingness refers to the applicability of the research findings (Sandelowski, 1986). According to Morse (1989), the appropriateness and adequacy of the sample is critical to the quality of the research. Appropriateness is "the degree to which the choice of participants and method of selection 'fits' the purpose of the study as determined by the research questions and the stage of the research" (Morse, 1989, p.122).

Sample selection in this study was guided by the researcher's attempt to find "expert" participants who were willing and able to articulate their experiences with prenatal classes. Adequacy refers to the quality and sufficiency of the data (Morse, 1989). The researcher assessed the participants' answers for relevancy, completeness and amount of information. The researcher asked for the same description with different questions and prompts at different interviews. To ensure adequacy, the researcher ceased sampling only when the categories became similar and repetitive and no new categories or interpretations were obtained from the participants (Field & Morse, 1985).

Content analysis of interview data was initially done with the assistance of a thesis committee member to ensure that relevant data were accurately categorized. In addition, one primary participant and one secondary participant were chosen to validate the categories.

Auditability

Auditability refers to the ability of another researcher to clearly follow the "decision trail" used by the researcher in the study (Sandelowski, 1986, p.33). In order to promote auditability, a detailed description of how the study was done, including the questions asked in the interview, is provided. Interviews were audio-taped, fieldnotes were written following each interview, and theoretical notes or memos were recorded during data analysis. These techniques allow other researchers to assess the credibility of the method and the research findings and thus enhance auditability.

Confirmability

Confirmability refers to the meaningfulness of the findings of the study. According to Sandelowski (1986), confirmability is achieved when credibility, fittingness and auditability are established. Confirmability was enhanced by having the research findings validated by two participants to help ensure that the interpretations of the data are seen not only by the researcher, but are also evident to others. Confirmability will be determined when the findings of this study are reported and others find them useful.

Ethical Considerations

Ethical Review

The researcher received ethical approval for this research study from the Joint Faculty of Nursing/University Hospitals Ethics Review Committee at the Faculty of Nursing University of Alberta, the Investigative Review Committee at the tertiary hospital, and the board of the two agencies offering prenatal classes.

Informed Consent

After receiving information regarding the purpose, procedure, and time commitment of the research study, each participant participating in the study signed a written consent form (Appendix C). The consent form was assessed by the Right-Writer computer program and is below a fifth grade reading level. Although participants were provided with the opportunity to ask the researcher any questions about the research study throughout the interview, no participants had questions. The researcher assured participants that their care at the agency did not depend in any way on participation in this study. The researcher stressed that participation in the study was voluntary at all times and that participants could withdraw from the study at anytime without penalty.

Confidentiality

Confidentiality of all personal information including any written materials, audio-recorded tapes and transcripts was guaranteed. Only the researcher, her transcriber and her thesis supervisor had access to the raw interview data. These individuals agreed that the information would be kept confidential.

Informed consent forms were stored separately from the audiotapes, written material and transcripts. All materials were kept in locked cupboards when not in use and were accessible only to the researcher. Audiotapes, written material and transcripts will be kept for seven years (University of Alberta Research Guidelines, 1992). Consent forms identifying the participants were stored separately from the data and will be destroyed after five years.

One participant revealed to the researcher a concern about the parenting abilities of a teen mother who was attending the same agency. The researcher discussed this concern with the participant and, with the participant's permission, notified a counsellor at the agency involved with the teen mother.

Anonymity

The identity of participants and their involvement in this study was known only to the researcher. Data collected during the study including stories, quotes, and ideas were kept free of identifying characteristics. A number and fictitious name were assigned to each participant to identify the participant on audio tapes, transcriptions, and fieldnotes.

Participants were made aware that the material in this study may be used in teaching, writing for publication, and possibly secondary analysis, but that no names will be used. If secondary analysis seems appropriate, ethical approval will be sought for any new proposal.

Risks and Benefits

There was no monetary gain or other benefit to the participants in this study. It is hoped that participation in this study provided an opportunity for the participant to help others understand the experience that is being addressed. Participation in the study involved a commitment of one interview of approximately one hour each in length. All information was kept confidential and it was left up to the participant to decide whether or not to discuss the interviews with significant others, including parents or peers.

All participants expressed an interest in receiving a summary of the study results. Participants filled out the lower portion of the consent form (Appendix C) so that the researcher can forward study results upon completion and acceptance of the research study by the thesis committee members.

CHAPTER IV

FINDINGS

Health care professionals often assume that adolescents are either not interested and/or not able to articulate their health care needs and thus actively participate in the development of adolescent health care programs (Levin, 1989). This assumption often results in a gap between what adolescents want and like and what is offered to them in health care programs. To overcome this gap health care professionals must listen to adolescents' perceptions and be cognizant of their experiences with health care programs that are supposedly tailored to meet the needs of the adolescent population.

In this study eight categories were identified which provide a description of the participants' perceptions of and experiences with prenatal classes. These categories were: (1) motivated to learn, (2) quest for information, (3) information gained, (4) not feeling prepared, (5) barriers to learning, (6) preferred teaching-learning methods, (7) non-preferred teaching-learning methods and content, and (8) suggestions for change. One additional category, making the transition to parenthood, was included to provide a beginning understanding of the context of the participants' world.

The text includes descriptions of the participants' ideas and verbatim quotes in order to capture the essence of the participants' perspectives.

Fictitious names were given to each participant: Laura, Cathy, Kristen, Liz, Karen, Debbie, Sheila, Barb, Heather, Diane, Monique, and Alyson. The data are identified using the notation (Laura, 1.1), which identifies the participant by her fictitious name, participant number and interview number.

Motivated to Learn

Prenatal classes were optional for the teens in this study. Although they found out about the prenatal classes from a variety of sources and were often encouraged by others to attend, the participants in this study all made a conscious choice to attend prenatal classes thus showing motivation to learn.

At one site (Teen Class 1), the prenatal classes were part of the school curriculum. Karen's comment typifies the procedure that participants at this site went through in selecting prenatal classes.

> When I registered...we had to fill out forms for that spot of the day. And there was prenatal on there, so I thought, okay, I'll try it. (Karen, 5.1)

Participants who attended prenatal classes at other sites (Teen Class 2 and General Prenatal) found out about the prenatal classes from a variety of sources including friends, family members, physicians, and school counsellors.

> Well, I went to my obstetrician and he suggested it to me and he gave me a brochure thing and it had all the dates so I looked on the dates and I went to the very first class they had. (Barb, 8.1)

> Actually, I was babysitting for a friend and she was pregnant at the time and she was going to the prenatal classes and this was

> when I like found out I was just pregnant so, and she told me to go because it really helps, 'cause this was her second baby and she says it really does help, so and then I thought well, I'll try it and she gave me the number and I signed up and I went. (Heather, 9.1)

Monique told the researcher that her mother had signed her up for the prenatal classes without her prior consent, however she decided to follow through and attend the classes.

> My mom found out, and then she phoned there and made an appointment with them or whatever, an appointment. She didn't tell me I was going to prenatal, she just made it, you know. But then I just decided to go. (Monique, 11.1)

Reasons given for choosing to attend prenatal classes at a particular site included cost, ease of transportation, and desire to be with other teens.

> I wanted to go to those classes [at Teen Classes II] but twenty bucks, you know, it may not seem like lots, but it is much to me 'cause I don't have a lot of money and stuff....I wanted to go to them, but it was all right, but I'd rather...have it somewhere where I am going to be, such as school....You know instead of going out of my way. Like maybe one night I don't feel well or nothing like that. And you know there's prenatal, gone. (Laura, 1.1)

> Just mostly that they're with teens and I didn't feel really good about going to the classes where there was all adults, so I thought it would be better if I was with people my own age.... (Diane, 10.1)

There were varying opinions among the participants as to the importance of prenatal classes for pregnant teens. Cathy's comment is typical of the five participants who felt it was very important for teens to attend prenatal classes.

> Very, very, very, very, very important. Very....'Cause I was scared, I was a scared person. I think you need to learn a lot.

> There's a lot that you learn about the baby and there's a lot that you learn about yourself and the labor. So you learn a lot about, like a little about everything. And that little can help you a lot in the end. (Cathy, 2.1)

Several participants felt that attending prenatal classes may be important only to some, but not all teens.

> Well if you have lots of questions, then it's very important. If you don't have any questions, it's just a waste of time. (Barb, 8.1)

> I guess it would depend on the kind of education that you already have in that area. Like if you know basically the basics, then I don't think they're really that important, but if you're thirteen or fourteen and you're scared and you have no idea, then they're really important, like a big help. Because then you would know what to expect. (Debbie, 6.1)

Only two participants felt that attending prenatal classes wasn't very important especially if the information was available from other sources.

> I don't think it's all that important. I think if they've got friends to talk to, that'll do just good too. And they've got a doctor they're going to, if they have any really major concerns....Like you can ask anybody really, and anybody with half a brain would ask somebody else too. 'Cause your prenatal's not going to be there all the time, twenty four hours a day if something happens, you've got other resources you can talk to. Your parents, or friends, or your doctor, or whatever. (Karen, 5.1)

> I don't find it really that important. I found it really easy to skip actually, 'cause it was really boring. It's like really boring....If you want to learn about, then go for it. But if you don't want to learn about it, then you know you're not going to enjoy it or anything like that. It may be important to attend because then you get in trouble from your teachers. (Laura, 1.1)

Most of the participants stated that they thought teens should attend prenatal classes offered exclusively for teens. Reasons given for this viewpoint focussed on the teen not feeling judged by older, often married couples and being able to talk about more age-appropriate issues.

> I think they should [go to prenatal classes] with other teens. They'd feel more accepted. Like if they just go to regular prenatal classes with older women, they might be looked down upon, you know. Oh you sleeze, or whatever. They wouldn't be able to relate, you know. They wouldn't be able to talk about what's going on with them and their lives. It's just like the woman and her husband and how wonderful life is, and ooh, they're just loving it, you know. Like different people. (Debbie, 6.1)

Three participants stated that having teen-only prenatal classes may not be a good idea. The main disadvantage given for teen-only prenatal classes was that not all teens are the same.

> I don't really think that teens should just be with teens. I think it should be everybody for prenatal classes....'cause all teens, none of them are the same, they're all different. And it's just kind of hard to relate to some of them....Some of them were just a little bit immature....because you're a teen, doesn't mean you're going to get along and have things in common with all the other teens. (Kristen, 3.1)

> It drove me up the wall [being in a teen-only prenatal class], I didn't really like it, 'cause...there were only three other people about my age, and everyone else was younger. So it bugged me to be around people that were younger, 'cause they seemed so immature....I guess it basically depends upon...if you want to be with other teens or if you want to go to the adult thing, 'cause it seemed like they were treated like kids more. Where you have a whole bunch of teens....I felt like a little kid there. People complaining about their boyfriends and their mom and all that. (Sheila, 7.1)

> I think teens could be mixed with the older couples. 'Cause then you get to meet other people having children, not just teenagers....[the other teens] were all still with the fathers. That was hard! (Liz, 4.1)

Participants identified several informal sources of information during their pregnancy beyond the prenatal classes they attended. Family, friends, other pregnant teens, books, the media and other classes were the most prevalent sources of information identified.

> At home and with my friends, like my close friends, I always talk about. Like especially with my one friend who has the baby, like she's great. 'Cause her baby's already two which she was also 16 when she had her baby, so she tells me all the things what I, what she thought what I shouldn't do, like she did wrong, like she tells me, you know stuff that's really good. (Cathy, 2.1)

> I knew lots of people, so if I ever had a question, I just asked them....I never learned much through prenatal classes and that. Just more books than anything, or asking people. (Kristen, 3.1)

> Also I took this class here that has nothing to do with prenatal, but it's called Baby Wise. It teaches you, you know how to control your temper with the baby and your patience and stuff like that....They had a film on babies and what they do and what's a disengagement movement. You know, it's hiccups and stuff like that, like tongue. It's the baby talking to you telling you to stop, or it needs a break or something like that. (Laura, 1.1)

Although adolescents in this study found out about prenatal classes from others, the choice to attend the classes was their own. The choice to attend prenatal classes at a particular site was then based on ease of access, low cost and desire to be with other teens. Adolescents tended to view prenatal classes as important for pregnant teens and, while there was some dissent, generally believed that teen-only prenatal classes were advantageous. Adolescents sought information from others beyond the prenatal classes especially family, friends and other pregnant teens.

Quest for Information

All of the participants stated that they attended prenatal classes because they wanted information. When asked what sort of knowledge or information they were seeking from prenatal classes, initially participants described fairly general learning needs.

> I wasn't looking for anything specific. I was just there to learn. (Laura, 1.1)
>
> I wanted to know everything, from labor and from the baby growing inside you, I just wanted to know everything, just because it was totally different for me, it was my first time being pregnant and my first baby, and it was just all new, so I wanted to be prepared, like I asked like so many questions, but, I just wanted to know everything, everything they taught me. (Heather, 9.1)
>
> I just wanted to know what I would be in for. Just wanted, like just to get informed. To know...what's to be expected. Like I didn't want to go into it not knowing what was going to happen. So, that's why I went. (Karen, 5.1)

Four participants chose to go to two different sets of classes at different sites. The decision to attend more than one set of prenatal classes was based on a quest for more information.

> I missed labor and delivery [at the first set of classes]. And the nurse suggested that I should go again because I missed labor and delivery. (Laura, 1.1)
>
> Well I was hoping they'd teach us a little bit more about breathing, 'cause at...[site of first set of prenatal classes] they didn't do as much in it as the other classes did. (Liz, 4.1)
>
> Well my mom thought it'd be better for me to go to...[Teen Class II] because it's just for teens. And then I thought the other one would be better, so we decided just to do both....I thought [General Prenatal] they'd probably give more information (Liz, 4.1)

Heather and Cathy also shared that their not knowing what to expect scared them.

> I was scared. Yea. I was scared about what may happen. (Cathy, 2.1)

> I was really scared, I wanted to be prepared, knowing what it would be like for labor and stuff, basically I just wanted to be prepared, what I was gonna go through. (Heather, 9.1)

When asked to identify the questions they had before going to prenatal classes, participants were better able to articulate their learning needs. Specific informational needs focussed on seeking assurance, concern about body image, coping with labor and delivery, and expecting depression.

Seeking Assurance

Several participants wondered about body changes they experienced during pregnancy and sought assurance that everything was normal.

> Like what kind of aches and pains will I get, are they okay, or if this goes wrong is that okay, is it normal? Um, if I eat this way, will it be okay? (Cathy, 2.1)

> I was always having back pains. I didn't know if that was supposed to be normal or, um, I felt dizzy sometimes. I didn't know if that was normal. I was always sick, I knew that was normal. Um, my breasts becoming very sore and stuff, I didn't know if that was supposed to happen. I thought that was supposed to happen after you had the baby. But, then I found out that that's all normal, so, nothing to worry about. (Karen, 5.1)

> Well, I used to get really upset for no reason. You know, I was pregnant and I didn't know if that was normal. (Liz, 4.1)

> I was really small for how far along I was, like I was under what I should have been and I was worried about that, it was like, I thought there was something wrong because everyone at the prenatal classes that was not even as far along as I was, was

> bigger than me, so I thought there was something wrong. I wondered about that, a lot. (Diane, 10.1)

Concern about Body Image

Body image was a concern for many of the participants. Specifically information was sought about the changes their bodies were going through both before and after having the baby.

> About how much weight you should gain, and different kinds of changes you go through. (Liz, 4.1)
>
> I was wondering how fast you can lose the weight. (Karen, 5.1)

Coping with Labor-Delivery

Typically participants wanted information about what to expect and how to cope during labor and delivery.

> All the emotional stuff, you know what you go through...during and after, and like what happens you know when the baby's being delivered and how they do it, breastfeeding and how to breath, you know that stuff. (Monique, 11.1)
>
> About labor. I was scared about labor. I knew, well I didn't know everything else, but, I wasn't scared about that. I was just scared about the labor and if I'd know how to push and how to take care of her [the baby] after. (Cathy, 2.1)
>
> I wanted to be prepared for the delivery, I didn't want to go in there freaking, you know. Like not know how to breathe and stuff like that, and I wanted to know what was happening to my body. I wanted to know about the different stages...and I wanted to know about the different phases during pregnancy. (Debbie, 6.1)
>
> Well I was wondering how bad the pain was going to be. I wanted to know the different kinds of things they did. Like I'd heard of forceps and that and I didn't know what it was. (Liz, 4.1)

> I wanted to know how long labor would be. Like I wanted to know exactly [emphasis added] how long it was going to be....I had questions about like what happens if you get stuck? Or, um, if you rip, like what do they do and stuff? (Karen, 5.1)

Expecting Depression

When asked if they had questions about what to expect after the baby was born, most participants stated that they had not really thought about it. Only two participants had questions or concerns about the postpartum period. Laura and Monique both expressed concern about postpartum depression.

> I know they were supposed to expect some postnatal depression or something like that, or pre--, I don't know. Some sort of depression or stuff. I went through that. But, after the baby was born I just, the only thing I wanted to know was how long I was going to bleed for. (Laura, 1.1)

> I worried about being depressed. People wouldn't always be here to help me and stuff like that, like what would I do if she [the baby] would cry and I wouldn't be able to stop her crying. (Monique, 11.1)

Overall, adolescents in this study had difficulty identifying what it was they wanted to know when they attended prenatal classes. Only when asked to think about some of the questions they may have had before they went to the prenatal classes were participants able to identify specific learning needs. The need to know about what to expect and how to cope during labor and delivery were the most pressing learning needs identified. Other learning needs included the need to be reassured that everything was normal, concern about body image and postpartum depression. Interestingly the majority of participants did not identify any learning needs about baby care.

Information Gained

When asked what sort of information they learned about in prenatal classes, initially participants focussed on information about labor and delivery.

Learning about Labor

> A lot about labor and delivery and to do it and how to breath and what I'd be going through. (Monique, 11.1)
>
> I learned about the different procedures that can be done, I learned about C-sections and the different ways that the baby can be born like the different ways it faces, and when the placenta's delivered, born first. And I learned about how to know when you should go to the hospital, when you're in labor, when you should go, when it's time to go to the hospital. I learned about the different things they did to you, like episiotomies and stuff like that. That's what I learned. (Debbie, 6.1)
>
> Breathing....Birth, the different kinds, the vaginal, the caesarean. (Sheila, 7.1)

Only when asked specifically about the antepartum, intrapartum and postpartum periods were participants able to articulate information they had learned during all three of these periods.

Learning about the Unborn Baby

Most participants confirmed that they had learnt about the growth and development of the unborn baby and the effects of drugs and alcohol on development.

> I learned about it's growth and development when it was inside me, from the first month from conception to birth, I guess, when it starts to move around and kick, and when it can detect light and day, and when it can hear things outside. When it starts sucking its thumb and stuff. And, I learned about the different things not to take. Like I knew not to smoke or do drugs or alcohol, or stuff like that, 'cause it can have bad effects on the baby. (Debbie, 6.1)

> I learned so much about the baby, like, and it's so weird, like, I know there's a baby inside you, but it's just weird and watching it develop from just, it was so weird, like, I don't know, I just thought it was very weird that this little life could be inside you, you know and you're watching it. (Heather, 9.1)

> What did I learn about the baby? Mostly everything I eat is what the baby's eating, like what I do, the baby's doing the same thing. (Diane, 10.1)

Although several participants said that while they had already heard about the importance of not drinking or taking drugs during their pregnancy, at prenatal classes they learned about the reasons for this.

> Well I heard things again, but more into depth, like why it harms the baby. Like I know how it harmed it, like it makes it smaller and you know, asthma and all that kind of junk. But I didn't know why it harmed it. (Laura, 1.1)

> Even if you knew stuff they touched on stuff that you weren't sure about and they made it clearer. Yea they made it clearer I guess. (Sheila, 7.1)

Learning about Themselves During Pregnancy

Most of the participants indicated that they had learned about what they should eat, do and not do during their pregnancy, especially about proper nutrition and the avoidance of drinking or taking drugs during pregnancy.

> Eating and that. Although I wasn't too interested in that, but that was more or less what everybody was always talking about. Was how you eat and exercising and everything else. (Kristen, 3.1)

> I learned that I was changing and all that. I don't know, basically all about how my intestines were being pushed up, that was basically the main thing. (Sheila, 7.1)

Only two participants said they had learned about emotional changes that may occur with pregnancy.

> I learned about the feelings I was experiencing, the mood swings, the cravings and why you have them. The stages that my body was going through. (Debbie, 6.1)

> I learnt how your body changes and sometimes, like I thought I was going crazy at first, 'cause I thought, I'd be like crying over stupid little things, like my potatoes weren't cooking fast enough, so I start bawling, it was just weird. I didn't know that pregnancy could take so much over your body and what you do and how you think and they just taught me everything from why you have mood swings and how your body changes and why you have rapid mood swings and about feelings and you know and how you feel during your pregnancy. (Heather, 9.1)

Several participants noted that they had learned that what they were going through with their pregnancies was normal.

> I learned about his growth and development....I knew most of it, just common sense. But it was helpful to know what was happening to him, like, I think it's better for people to know what's going, how their baby is growing because then it puts their mind at ease. Then they know what's going on is normal. (Debbie, 6.1)

> I just learned about how he's growing and learned, um, that what I was going through was normal with him. Like when he would not, he sometimes would just stop moving and wouldn't move for a couple of days. And I'd get really scared, I was like what's happening, is he dying or whatever? And I learned that he's just growing and taking a rest. (Karen, 5.1)

Learning about Themselves During Labor-Delivery

All participants felt that they had learned something about labor-delivery. Information shared by the participants focussed on techniques for coping during labor-delivery and procedures that they might encounter.

> I learned about the baby monitors, I didn't know anything about that, or the ultrasounds, I didn't know nothing about that either and I learned about that. (Barb, 8.1)

> That there's different labors and they're not all the same. And delivery can be tough or easy. (Sheila, 7.1)

> About when you dilate, and why they give epidurals, how long it takes approximately, breathing techniques. I don't know, pushing and that, and how long it takes for that. (Kristen, 3.1)

> Just that it's gonna be lots of pain and that if I need drugs, they'll give me drugs. (Diane, 10.1)

Heather and Karen described how they were able to apply the information they had learned in the prenatal classes to their actual situation during labor-delivery.

> We did practice contractions that would last for four minutes and we practiced our breathing and we did exercises which I found were really helpful because I had such a sore back, so some of the exercises really helped and then when she showed us how the baby comes out, like and then how it crowns and how it has to be crowned and then what you go through and each stage of labor, 'cause there's different stages of labor, which I didn't know and then what you're feeling and what you're gonna be doing and then she says "Right at the end you don't care" and she was right. (Heather, 9.1)

> She said that music often helps and that did. There was a tape recorder in there and that helped. We brought in tapes and I was listening to music that I like and that really kept me calm...I looked at the clock a lot. Just to watch the clock. And sometimes I would just close my eyes, because then I can't look around, and

> that's what kept me focussed. Just to close my eyes. (Karen, 5.1)

Learning about Themselves after Having the Baby

Only three participants stated that they had learned anything about themselves after having the baby. Information tended to focus on involution of the uterus, exercises and postpartum depression.

> I learned...how long it takes for the uterus to go back down to normal size. The exercises, we got a little pamphlet on exercises to do. And things that we shouldn't be doing. (Debbie, 6.1)

> They told us that you get really upset afterwards and that's normal...Well about the exercises to try to get back into shape. (Liz, 4.1)

> Some people, like, it's all right if you still want to have the same appetite and stuff like that, like most people do, they encourage towards things like that. Um, that you might be depressed and that was really all. (Diane, 10.1)

All participants felt they hadn't learned enough about themselves after having the baby. The following quotes from Laura and Karen are typical of other participants.

> Let's see after, what did I learn after? Nothing really, they didn't teach much about after, after you have the baby. They mostly taught about delivery....You know they made it sound like a piece of cake. (Laura, 1.1)

> We didn't really talk about what happens after, we talked about if you get depressed, but not how [emphasis added] depressed. I was shocked to think that, 'cause lately like I've been so moody, it's just. And we didn't really talk about that, so I never really even expected it to happen like that. I thought it would be just like a normal, like PMS [Premenstrual Syndrome], but it's worse. I didn't know about that. I was scared thinking that there was something really wrong. Like I, I was going to go back to the doctor and say what's wrong with me? It's like, I'm crying all the

> time and I'm so depressed. Like give me something so I'm not so depressed anymore. But my mom told me, she said, no, that's normal. That's going to be like that for a couple of weeks. So, I was like, "okay!" (Karen, 5.1)

Learning about the Baby after He/She is Born

Almost all participants described learning something about the baby after birth. Information tended to focus on feeding and bathing the baby.

> I learned...about breastfeeding...how to get the baby to latch on proper...how to the hold the baby and everything. (Laura, 1.1)

> Well that was basically it, just how to breastfeed and how to bathe the baby and well just how to care for the baby after its born, like bathe the baby, and change the baby and dress the baby and then talking to your baby and stuff like that. (Heather, 9.1)

> We learned how to bathe the, um, we learned like the kind of formulas there are and stuff like that, how to feed them, how to burp them...And then how once they're born the changes they'll go through. (Diane, 10.1)

Three participants stated they hadn't learned anything about the baby once he/she was born. Laura described learning about the care the baby would receive in the labor-delivery room, but nothing about how she should care for her baby.

> That they clean out the mouth and stuff like that. And that they wrap it up in a blanket and you get to hold it and then they take it away and wash it and then they give it back to you. We didn't talk very much about after. After delivery. (Laura, 1.1)

Thus, initially participants described learning mostly about labor and delivery at the prenatal classes they attended. Only when asked to consider what they may also have learned about the antepartum, intrapartum and postpartum periods were the adolescents in this study able to describe other things they had learned. Participants described learning about the growth and development of the baby and the reasons for avoiding drugs and alcohol during pregnancy, what to expect and how to cope during labor and delivery, and to expect depression and how to feed and bath the baby in the postpartum period. All participants believed they hadn't learned enough about themselves in the postpartum period.

Not Feeling Prepared

Only one participant thought she was prepared after taking the prenatal classes. All other participants stated that they felt no more prepared than they had prior to attending prenatal classes.

> Not very, actually. It didn't help me a lot, actually, I wasn't prepared at all. It didn't give me enough information on like what I would be going through and it didn't give me any way like how to cope with the pain when I was in labor, it didn't help, like they didn't, they said oh just breathe...like it wasn't helpful to me. (Diane, 10.1)
>
> [Prepared for] labor/delivery. I don't think I was really prepared for like postpartum, but I got through that I guess. (Monique, 11.1)
>
> How prepared can you feel? You just don't know what to expect. (Kristen, 3.1)

Laura and Kristen said that although they didn't feel prepared, they had gained knowledge from taking the prenatal classes.

> As prepared as I was when I began. Just a little bit more knowledged. A little more knowledge in my head. But, you know, I still wasn't ready for it [eyes downcast]. Just I don't think you can be too ready, too prepared for it. (Laura, 1.1)

> I don't think anybody can be totally prepared for it, like they can have the knowledge you know, sort of what's going to happen. But I don't think anyone's really prepared for it. (Karen, 5.1)

Thus, in spite of gaining more knowledge, adolescents in this study did not feel more prepared for either labor or caring for their new baby after attending prenatal classes.

Barriers to Learning

Many of the participants were able to identify reasons why they had not learned what they had wanted to learn in the prenatal classes.

Denial

For several of the participants, denial of the reality of their situation influenced their ability to learn in the prenatal classes.

> Maybe I wasn't listening during class...it just didn't really sink in that it was happening. Like I really never thought I was pregnant. Like it's still hard to believe that he's mine. Like I keep thinking in my head that one day he's going to go. Like he's just here for a visit then he's going to go away. But that, like it's been two weeks, he's not gone yet [laughs]. Um, I don't think that really talking about it, it sort of prepares you, but you don't really know what's going to happen until you're actually doing it. (Karen, 5.1)

> I didn't think, like they talked about sometimes, you get depressed. I didn't think I would, but I did. Big change. But I wasn't really concerned about it [learning about what to expect after the baby is born]. I thought, oh no, I won't [get depressed]. (Diane, 10.1)

> It was my biggest fear [getting through labor] and when I went to prenatal classes I didn't really want to pay attention to it so I just joked about it, and I made jokes and stuff in the class, so I was the big class clown in that class, 'cause I was really scared in that class. (Barb, 8.1)

Not a Recognized Learning Need

Five of the participants had said that prior to taking prenatal classes, they felt they knew what they needed to know about caring for their baby. Maternal instinct and babysitting experience were cited as the reasons for their preparedness. These participants felt that they had not learned anything new about baby care in the prenatal classes.

> I wasn't looking towards that part....Through my own self I knew, you know, I don't know if it's motherly instinct, or, but I knew. Like I babysat a lot before so I wasn't really worried about that part. (Cathy, 2.1)

> I was always with children. I've never had a problem. I always know what to do....It just came natural. I never had no problems at all. (Kristen, 3.1)

> I figured I knew everything that could possibly happen. If we didn't, we had the health nurse to call. (Sheila, 7.1)

Maternal instinct, babysitting experience and information from others gave most participants the impression that they did not need much more information about the baby and baby care.

> I was babysitting for four years or something like that before I got pregnant. And I don't know. I knew how to take care of kids and stuff like that. And you know, plus you have your own instinct, kind of thing. (Laura, 1.1)

> 'Cause I'd been babysitting ever since I was nine years old. So I've been around babies a lot [emphasis added]. So I knew how to, I know how to take care of a baby....I've known that stuff for a long, long time. So I never really had any questions about that. Something I knew. (Karen, 5.1)

> I didn't really wonder about the baby. I didn't think I'd be able to [look after the baby] but my mom said she'd help.
> (Monique, 11.1)

> The only thing I was worried about was umbilical cord, that's all I was worried about. Other worries I already know. (Barb, 8.1)

Difficulty Asking Questions

Almost all of the participants experienced difficulty asking questions during the prenatal classes. The main areas of difficulty included being too scared to ask questions in front of the class and difficulty articulating what it was they needed/wanted to ask.

> You don't really think of the questions at the time sometimes. You're either too scared to ask or you don't know how....if no-one else wants to hear it, then I should just keep it to myself. (Cathy, 2.1)

> Like there were questions in my head that I couldn't ask, like I couldn't put them into words. And it scared me like to not know something. (Karen, 5.1)

> I don't know what I really want to know because I don't know everything, but I know a bit. So I wouldn't ask for very much. (Debbie, 6.1)

> Well no-one really asked questions, really. Like, I think everybody was so shy, 'cause most people would be just sitting there, listening to the class....After classes, she'd always answer my questions if I had any...because then nobody would be around. (Diane, 9.1)

Diane and Karen felt that their boyfriends also experienced difficulty asking questions in the prenatal classes often because their concerns differed from those of their partner.

> He had questions but he wouldn't ask them, he got me to ask them. It was mostly about boys, though. Like baby boys, he wanted to know lots about them. (Diane, 10.1)

> Sometimes my boyfriend would ask a question and she would just totally ignore it. And I don't know if it's because she never heard

> it, or what, but sometimes she made the guys that did show up feel like they weren't important. I don't think that's right because they're there because they care....He was more concerned about me. He was concerned about how the baby was affecting me. What was going to happen while I was in labor, like is there any chance that I can get into trouble....He was concerned about [the baby], but he was more concerned about my health, because he didn't know the baby and neither did I....He wanted to be reassured that everything was going to be okay. And sometimes he would ask a question like what's going to happen or whatever. And she would brush it off like it was a really stupid question and it made him feel pretty small. He got pretty upset sometimes, that's why he didn't go to all of them. Because he felt what's the point? I'm going to feel really small anyway. I don't want to be made like to look like a fool....Like for the girls she [the prenatal instructor] was very, very nice, but for some of the guys that showed up, she didn't really make them feel like they're supposed to be there. (Karen, 5.1)

Barriers to learning identified by the participants included denial of the reality of their situation, not recognizing a learning need, difficulty articulating questions and asking questions in front of the group. Two of the boyfriends of participants experienced difficulty asking questions as their concerns focused on their partner and they felt awkward asking the instructor questions.

Preferred Teaching-Learning Method

Participants were asked to describe how information had been presented in any class they had ever attended where they had really enjoyed learning. The responses indicated that most participants liked working in small groups and having the information presented visually.

> Visual. I don't like people talking to me and telling me stuff. In one ear and out the other....Graphs and charts and coloured pictures. (Debbie, 6.1)

> Probably with something to look at, visually. You know it makes it more interesting so you're not sitting there looking around....I'd say the group thing for me. (Sheila, 7.1)

> I like small groups....you know, talking back and forth about your own experiences. (Cathy, 2.1)

> Small group...'cause I'd like to get out what other people say, I'd like to get the information of what they say. (Diane, 10.1)

Karen was different. She identified herself as a 'slow learner' and preferred to learn in a one-to-one situation with the teacher.

> I like being one-on-one with the teacher. And having background noise like music, low. That's the way I learn best. Yea, it's one-on-one 'cause then I get the information firsthand. Like I'm a very slow learner. Like it takes me a long time to learn something. And if I'm one-on-one it goes faster, so that's the way I do it (Karen, 5.1).

In contrast, Laura preferred to learn on her own.

> Mostly, like do it you know myself. Go through it and then I learn, usually. But mostly like I like to learn on my own. Not you know one-on-one or in a classroom, or anything like that. Just on my own, like do my own thing. (Laura, 1.1)

While individual preferences were evident, the majority of participants preferred learning in small groups and liked visual presentation of material as it enhanced their grasp of the content being presented.

Visual, Realistic, Hands-on

When asked to describe the kinds of things that happened in the prenatal classes that they liked, participants were able to identify a variety of preferred teaching-learning methods and approaches. The most frequently mentioned teaching techniques were the use of realistic visual aids and hands-on experiences that involved the learners. Realistic teaching techniques were concrete and close-to-life and enabled the adolescent to see what to expect.

When participants described visual aids, they included pictures, charts, models, pamphlets and videos in their discussion. Participants liked visual aids that were realistic, up-to-date and showed teens rather than older women/couples as the prospective parents. Debbie described a realistic aid as follows:

> She had a little, a little sac, it had a pretend baby in it and she used that to demonstrate how it would come out. She had a little breast to show how to breastfeed. She had a little fake one that she would use to demonstrate how the baby should be latching on properly and stuff like that. That was, that helped, 'cause I was confused, I wasn't sure what to do. I thought it was really hard and takes practice, and I was, oh no, what if I can't do it. So that really helped....and like, she had a big picture and it had the way the baby was coming out and stuff like that. That really helped to know, instead of just saying oh it does this and this and that. Pamphlets and stuff to read. Filmstrips. Little videos showing actual births. (Debbie, 6.1)

> They had pamphlets and everything. We had basically all visually, she had something to show for everything that they talked about. (Sheila, 7.1)

> Watching the videos on childbirth. She had one on, it was a teen, so it wasn't like an older, like not an old lady, an older woman having a baby. She had like teens and stuff on the video. (Cathy, 2.1)

> I like the films the best, where they're watching the baby develop and they're showing it slide by slide. I just think it's amazing and then when she was born I couldn't even believe it. I thought, she was inside me. (Heather, 9.1)

Realistic, hands-on experiences involved experiences that allowed the adolescent to see and practice with props that were in life-like proportion. Only four participants, all of whom attended prenatal classes at Teen Site 2, said that they had hands-on experiences during prenatal classes. They described being able to try out the birthing bed in the labor-delivery suite and bathe a baby in the nursery. These participants described these experiences as beneficial to learning.

> She took us up there [to the labor-delivery suite], and they let us sit on the bed, put the monitor on us and stuff like that....Because you get to actually be in the room and know what to expect, not just, boom, be in there. (Cathy, 2.1)

> They took us upstairs and showed us on the babies and how to bath them and that, take care of them....It helped teach you how to do things I didn't know how to do. (Liz, 4.1)

Personable Teachers

Participants described things they liked about their prenatal instructors. A personable teacher included someone who participated in the learning experience, was responsive to learner needs, provided choices and allowed input, shared some of her own experiences, encouraged participation, provided feedback and allowed fun.

> She was really good for like doing the exercise and making sure that everyone was doing them properly....And she did relaxation exercises, where we'd all be lying on the floor and she was talking to us and she was funny too. She's a really nice person. (Heather, 9.1)

> It was really good when the teacher one day we just had her, just a question that I brought up, like what happens if the placenta releases before the baby's born. Like she was talking about that,

> and then everybody else got into it. You know we were talking about what kind of things can go wrong during delivery and how the doctors know, and stuff like that. That was really good, it was really informative. (Laura, 1.1)

> Everybody talked about what they wanted to...so you know you weren't all held back from what you wanted to know. And, so they asked you what you wanted to learn, and they took us...a sheet of paper and they made you check off what you wanted to know and then they like worked around what we wanted to know. And like if your's didn't come up you could ask, well I wanted to know about this and so that was really good and I don't know, it helped a lot, yea....It's the way we talked. We talked amongst each other, not having a set way to go. Asking people what they wanted to know and combining you know, and then work on it from there. (Cathy, 2.1)

> One of the ladies like was a mother and she told us what she went through and stuff like that....She was a fairly new mom, her baby was only about three months old or something. So her labor wasn't that long ago. So she told us what she went through and stuff like that. (Cathy, 2.1)

> The teacher would take time to go around to each person and teach them individually....She was able to explain more in detail, like if you were breathing right or not. (Liz, 4.1)

> It was funner to be in the group, because everybody's always talking and stuff. Like you're not being left out, like if you're in like a math class or something....But in prenatal, everybody was talking to each other and asking questions and stuff, so. That was, that was fun there....I liked it because we laughed. It was a fun time. It wasn't exactly considered a learning time. It was, we joked around sometimes, but while we were having fun we were learning too. That's one thing I really like is having fun while you're learning. (Karen, 5.1)

Providing Food

Six of the participants attended prenatal classes at a site where a meal was provided during class time (Teen Class 2). Barb's comment typifies how well teens received this idea.

> The food was a good idea. The food was like an awesome idea. I thought that was a really good idea, instead of going there and starving yourself for a couple hours, you know, I don't think that's good, especially when you're pregnant, I don't think that's really good so, so that's what most of us really wanted there, is the food, you know, eat and watch videos. (Barb, 8.1)

Using Variety

When describing the kinds of things in the prenatal classes that they liked, all participants mentioned more than one preferred teaching-learning method. Barb clearly articulated the importance of a variety of teaching methods.

> It was presented through videos, it was presented through books. They're telling us about it. They got models out and showed us. We all talked in groups. They gave us tours. Well, I liked it all, you know. I liked it all, 'cause it was different. We weren't watching videos everyday, you know. We weren't always having doctors coming in and talk to us or we weren't always getting tours or whatever and always talking in groups. (Barb, 8.1)

Overall, adolescents in this study preferred a variety of teaching-learning methods in the prenatal classes they attended. Participants liked information that was visually presented, realistic and hands-on, and liked teachers who were personable and fun, provided individual feedback, were responsive to learner needs, provided choices and allowed input. Using a variety of teaching methods and providing food were also strategies preferred by participants.

Non-Preferred Teaching-Learning Methods and Content

When asked to describe the kinds of things that happened in the prenatal classes that they **didn't** like, participants were able to identify a variety of areas relating to both content and process. Almost all participants stated that they felt there was too much review and repetition of material, too much information on nutrition, not enough information in other areas, too much focus on the baby and not enough information about themselves. Issues related to process included teaching methods that were too much like school and involved lack of input, use of the overhead projector and videos that were out-dated or too vivid.

Non-Preferred Content

Too Much Review and Repetition. Almost all participants mentioned that too much review and repetition was boring yet was a constant in the classes they attended. Frequently the problem was too much review of information they had received in prior classes, especially CALM (Career and Life Management) and Science-Biology classes.

> Most of it's just review, kind of thing from sex education....Oh, the babbling on and on and on about review, like how you got pregnant. Like obviously I know how I got pregnant. You know, like when the sperm meets the egg, this happens. Well, yea, we know that, we took sex ed. You know, for three years in junior high. You take reproductive system in science for three years in a row. I found that kind of, a bunch of useless really....and it'd be really boring, you know, to learn what we'd already learned in junior high. (Laura, 1.1)

For other participants, the problem was too much review of information they had already covered in previous prenatal classes.

> It was kind of boring 'cause she'd do it day after day. Like she'd go we'd do this yesterday, let's review. And she'd put it up and the same thing over and over again and it got boring. You know she didn't move on to new things, she just stayed with the same

> stuff....Basically she just talked about the same thing every day. We didn't learn new things. (Debbie, 6.1)

Too Much Information on Nutrition. Several participants found there was too much information regarding nutrition. This content was either a review of information learned in previous classes, or it wasn't necessary or interesting.

> All the nutrition and that. They overdid it with the nutrition. They should just have one class on nutrition and then the rest with everything else. There was more nutrition than anything else. (Kristen, 3.1)

> All the nutrition where they go over it twice. That was kinda boring....It was pretty well the same thing we learned in school. (Liz, 4.1)

Not Enough Information. Participants identified several areas where they felt information was either lacking or presented in an inappropriate or inadequate manner. Several participants complained that there was not enough time spent on learning how to breathe during labor-delivery. In Diane's case, while content on breathing was presented, the way in which it was taught was inappropriate.

> They didn't teach you a way to breathe. They just said you breathe in and out, there wasn't a certain way. So when I was in labor I was kinda like, oh what do I do next? (Diane, 10.1)

Areas where information was felt to be inadequate included birth control, bottlefeeding, pre-labor and individual variations.

> She should have spent more time talking about birth control after....There should have been more time on that and maybe less time watching all the movies all the time. (Karen, 5.1)

> When I finished the classes, I was still, oh what do I do in labor, like what am I supposed to do, um, they never taught me about pre-labor, like before you go into labor, what's gonna happen to you, so when that happened I was kind of like, oh God!, like what's going on? (Diane, 10.1)

> It's nice to know how much weight you gain, but heck everybody gains different weight, you know, it's not really a set point, or whatever. (Laura, 1.1)

Too Much Focus on the Baby. While many of the participants indicated they were interested in learning about the baby prenatally, three participants stated that there was too much emphasis placed on the baby, and not enough focus on themselves. Heather's comment clearly identifies this concern.

> We talked about everything, except we just didn't talk about us after, like how a woman's body changes back, we didn't talk about that after. We just talked about the baby. About caring for the baby....But basically we covered everything, except how we change right after the baby is born. (Heather, 9.1)

Non-Preferred Methods

Too Much Like School. For many of the participants, teaching-learning methods and approaches that were too much like the school-classroom setting met with resistance. This was especially the case if the prenatal instructor used a lecture approach.

> It had that school atmosphere. The feeling that you couldn't get up and walk around. 'Cause I didn't like sitting there when I was like so big, I wanted to get up and walk around. It was more like a school atmosphere. Like if you move, you're dead. (Sheila, 7.1)

> She didn't really make it that exciting for us. It was almost like a class kind of thing, you know. She's a teacher and blah, blah, blah, blah. It wasn't fun or interesting. (Debbie, 6.1)

> It was mostly the teacher at the front of the classroom. Mostly we just sat there and listened. I found it very boring. 'Cause I don't like that. I just can't sit and listen to a teacher, it just doesn't work for me. I don't know, it was mostly sit and listen and if you're interested then you listen, but if you're not interested you end up talking through the whole class. (Laura, 1.1)

This is in contrast to Heather and Karen's experience (p.84-85) where they saw learning as fun when they described the interaction that occurred in the group at prenatal classes.

Lack of Input. Prenatal classes that had a pre-set agenda where the learners were not provided with an opportunity for input or choices was problematic for several of the participants.

> The way they just told us what was going to happen. They didn't ask us for any feedback on what we thought or wanted to know. (Sheila, 7.1)

One participant noted that while input had been elicited from the class, she felt that the instructor had ignored it.

> They talked about breastfeeding, just about ninety percent of the time and I wasn't like gonna breastfeed. There was only one girl who was going to and that's all they talked about and the other, like all the other girls with me were like, you know, what are we supposed to talk about, sort of thing, like we're not interested in breastfeeding....They asked us, well, are you planning to bottle feed or breastfeed and the one said breastfeed, the others said bottlefeed, but that was still all we talked about....I don't think I heard anything about bottle feeding. (Diane, 10.1)

Dislike of the Overhead Projector. All the participants who had attended prenatal classes where an overhead projector had been used stated that they disliked its use and found it boring, dull and repetitive.

> Not the overhead! No way. It looks so dull and boring....It just bugged me....It just didn't keep your appeal much. You just sort of looked off. It was, I don't know, it was just boring to look at. It didn't hold your attention. (Sheila, 7.1)
>
> On an overhead projector. She'd write notes in big letters and put them up, and then she'd read them off to us and then discuss it....It wasn't interesting or it was repetitive and it got boring and you just wanted to leave. (Debbie, 6.1)

Dislike of Some Videos. Although almost all participants stated that the videos on labor-delivery contained some useful information, they also expressed some concerns. Several of the participants found that the labor-delivery scenes were too vivid. In contrast, other participants found that the labor-delivery scenes weren't realistic. They also thought that the message conveyed in the videos was that all labors and deliveries would be like the one(s) that were depicted. Several of the participants also felt that they identified too closely with the teens depicted in the videos and found that this upset them.

> And those films and where those chicks are delivering, they scared me, totally. Like, the first time I seen it...I went home and I had a nightmare about it. Yea, I was scared....I didn't find them that informative. We just watched somebody have kids. Sure it's a different experience and all, you see that you're going to go through that, but it's just not the same....It didn't help at all. What you're prepared for, like this chick went through this, you know, doesn't mean that you're going to go through that....Some girls in my class think that the girl didn't look that much in pain at all. But like I could see it in her eyes almost, kind of thing. And like I could read her mind, and it just scared me. It looked like she was in so much pain. (Laura, 1.1)
>
> Like there was one program we watched about this girl. She got stuck at five centimeters and they had to do a caesarean on her and when I was, I was stuck at three centimeters for the longest

> time, and nothing, nothing was happening. And I was, I got scared, 'cause I thought oh no! I'm going to have a caesarean. I was concerned about how they cut you and I was scared that if something like that happens, like you can die during it and whatever, and it just, it scared me to think that if I had to have a caesarean I could die and never see my baby. (Karen, 5.1)

> I thought they put like the easiest labors on there. Like they made it seem like it was not a problem....like it didn't seem like they were in lots of pain and then it was after, it was just they weren't depressed, nothing. Like it didn't seem like real life. (Diane, 10.1)

Two videos on nutrition were seen to be boring either because they were too long or because they were outdated and seen as humorous.

> Actually they [the videos] were boring. The labor ones were okay but the nutrition ones, like they were good to know, but they just drag on, drag on, and drag on. Even if I didn't know anything, like you know? So I don't know, they just, they need some new ones. (Cathy, 2.1)

> Those videos where the chicks had those hairdos, like in the 60s. We just laughed. Nobody looks like that anymore. (Karen, 5.1)

The adolescents in this study were able to identify a variety of non-preferred teaching-learning content and methods in the prenatal classes they attended. Non-preferred teaching-learning content included information on nutrition, a lot of review and repetition, and too much focus on the baby. Non-preferred teaching-learning methods included approaches that were too much like school, not having input or choices in class content, use of the overhead projector and out-dated or overly vivid videos.

Suggestions for Change

All of the participants were able to articulate suggestions for changes they would like to see in prenatal classes. Suggestions for changes in content areas related especially to breathing during labor, baby care, postpartum changes, and information for the coaches. Suggestions for changes related to process included sharing of experiences, other teens visiting the class, physicians speaking to the class, hands-on and practical experiences, and having food at different times during the class.

Changes Related to Content

All of the participants felt that there should be more information in prenatal classes regarding breathing techniques to use during labor. The following quote from Kristen typifies the identified need for demonstration, practice, and repetition.

> More breathing 'cause they only did I think half an hour, if that....Just to practice. To show us. To go over it. So everybody knows. (Kristen, 3.1)

All of the participants noted that there should be more information on baby care in the prenatal classes. Suggestions focussed on practical information such as how to actually hold, burp and bathe the baby; what to do with a crying or colicky baby; realistic expectations about the baby related to sleeping, waking and crying; and bottle feeding.

> Talk more about after the baby is born....what you go through. But just talk mostly about parenting. You know, maybe it's not prenatal, but you know parenting. Like I notice when I was holding him in the ICU, I was holding him wrong. I was holding his head too forward, so he couldn't breathe that properly. You know, I could have suffocated him [gets teary]....how to hold him when you're feeding him. Like sure I babysat for four years, I know how to hold a kid, but you know, with your own it's different. You know, you need...to know the basics...just teach

> the basics....You know some things don't come as an instinct, you don't know that you're doing it wrong. (Laura, 1.1)
>
> Well, colicky babies and how to stop them from crying and some techniques whatever, you know, like how to carry them and what to do, how to calm them down. (Monique, 11.1)
>
> At least everybody should of gotten to hold the baby, just to know what it's like, 'cause not many people are with newborns ever....they never showed me how to bath the baby...maybe some videos about what you do, how do you bath the baby, how do you do this....how much you feed them, and just more or less caring for them and taking care of them. What to expect with the feeding and colicky and all that....Then you'd know more about it and you'd know what to expect if it did happen. (Kristen, 3.1)
>
> About the formulas, and how do you know if your baby shouldn't be having that formula. 'Cause I'm not quite sure about that one yet....'cause they shove the breastfeeding down your throat. (Sheila, 7.1)

All of the participants felt that there should be more information presented in prenatal classes regarding the changes they themselves would be going through in the postpartum period. Four of the participants specifically wanted more information on postpartum bleeding as this had been a problem they encountered.

> Just afterwards, that's one thing I wish they'd say....like before if they'd told me that this could go wrong, that I'd have been scared out of my, like I wouldn't have wanted to go through it and causing all this stress, but, after I'd had it I wished they did. So like I wish like go through it maybe just a little....so I think they should say like something can go wrong....I don't think they should say too much because, I mean, it would have scared me. (Cathy, 2.1)
>
> One thing I wish I would have asked was about hemorrhaging. Because I hemorrhaged and I didn't know what was going on....It was scary. 'Cause I didn't know what was happening to me [emphasis added]. Like I wish in prenatal, I wish they would have

> talked about that more. Like they never, they never talked about it. And there's probably some girls that start hemorrhaging and they don't even know...and if they know what's happening before they could probably get to the hospital quicker and they'll be able to fix it quicker without maybe not even having to do the D&C...because a lot of people get close to that if they don't know what's going on. (Karen, 5.1)

Several of the participants desired more information about the changes their bodies were going through in the postpartum period and how to look after themselves.

> That's what I think is most important to know about. What changes you go through. 'Cause you do go through so much. 'Cause like your body has like nine months to change so slowly and then it's so fast they have to change back. And I'm still having afterpains....I didn't even think you did have afterpains....Probably to talk about how women change after pregnancy, because there's so much I didn't know. Like I didn't even know what was happening to me after because I felt like I was just going nuts or something. 'Cause like I was crying again, I was so depressed, and it was hard 'cause I didn't understand what was happening, like why I was feeling like that plus I'd have hot flashes all the time and dizziness and I'd like to understand like why that happens to us, like, or why that happened to me....Like it was hard for me to breathe after but it was a different type...it felt like everything sunk to the bottom of my stomach. (Heather, 9.1)
>
> I didn't know [I'd] be so depressed [with] my body changing. All those hormones! (Monique, 11.1)
>
> Like the feelings about [pause], this is going to sound weird, **sex** [emphasis added], basically. 'Cause I, I think it's disgusting. I'm like, I know this is okay because I just found out, like I think it was a week or two ago that half these girls here don't want it either. I thought it was myself, I was really scared, like do I love him anymore? 'Cause I could still, I could cuddle with him, I could touch him, but I just, sex, I just think it's disgusting....So I wish they'd say that that's okay. (Cathy, 2.1)

> A lot of us wanted to know how soon we can have sex afterwards. Like is it safe, whatever. And she never really addressed that. We wanted to know stuff like that, like the birth control and how to precaution ourselves so this doesn't happen again. (Karen, 5.1)

Kristen identified a need for more specific information for coaches regarding what to expect when their partner is in labor.

> They should tell, with the partners, when you bring partners, let them know more about what's going on so they're not, so they're ready and prepared for it....'cause I think it kind of shocks people, the coaches, when they actually see them 'cause it's a little bit different. (Kristen, 3.1)

Changes Related to Process

All of the participants were able to identify changes they felt should occur in the way that material is presented in prenatal classes. Providing opportunities for sharing of experiences amongst teens attending the prenatal classes and by having other teens visit the prenatal classes were identified as relevant learning strategies.

> Bring some people in that have been through labor and we could ask them questions and how they felt and their experiences. And you know the way they did it. (Monique, 11.1)

> You see it and you hear it, but like on the videos and stuff, but it would actually be better to have someone there to tell you. 'Cause some people could say oh it's horrible, it's terrible, it's the worse thing you'll ever experience. And then to actually have someone come in and you know, well it's not that bad you know. Sure it's painful but, you know....just to talk about it. A teen, not just a woman who had a baby. Just someone our age who we could relate to....like you know they're in the same boat as you, but to actually have a change to talk about it and stuff. Experiences about pregnancy, and how much weight you're gaining, and the water, and the stretch marks. It'd be good to talk about it. (Debbie, 6.1)

> Probably to have another teenager rather than have a nurse that had a baby. It's just not the same thing. (Sheila, 7.1)

Several participants thought it would be beneficial to have a physician visit the prenatal classes so that the teens could ask the physician questions that were not addressed during office visits.

> And I thought they should have had a doctor come in, 'cause when you go to the doctor sometimes you forget, and if they were at the prenatal class, it was like better, 'cause you're like dealing with it then. Then if you're at a prenatal class it means you're thinking about more when you're there....so people could ask him questions if the nurses didn't know. (Sheila, 7.1)

Having more hands-on and practical experiences especially in the areas of baby care and breathing during labor were important learning strategies identified by many of the participants.

> I'd have breathing exercises, getting on the floor, breathing you know like you see in the movies. Pillows and stuff. And I'd give out lots and lots of pamphlets and magazines and anything that they wanted to read to help them. (Debbie, 6.1)

> Why don't you just get a whole bunch of plastic dolls together, and you know, teach them how to diaper a baby and either that, or have one special doll made for it and have like, metal sensors on it, or something like that, and if you poke the baby, it'll start crying, or like an alarm will go off or something like that, or you know, get a doll that's like a real baby, like a plastic doll. Sometimes it'll cry. And you'll change it and maybe it'll stop crying, or not. And then you'll pick it up and hold it and maybe it still don't stop crying. You know, it'll test out your patience. Or a doll with a really annoying sound. You know, like a cry, but like a car alarm or something. And mostly like hands-on experience. Teach them how to burp the baby, like hold it up like sitting up or on your shoulder or over your lap....I think you should do after birth too. It's really to get parenting classes. Like sure, some people might think oh this is a joke....But then they'll, I'm pretty

> sure they'll think back you know, hey maybe I do need that kind of information. You know maybe I am doing something wrong. (Laura, 1.1)

> More kind of hands-on kinds of things where we could actually get down on the floor and practice our breathing and stuff like that. 'Cause we never did that....and maybe have things like, having our own little breasts and babies to try to figure out how breastfeeding works. (Cathy, 2.1)

At Teen Classes I, a meal was provided free of charge as part of the prenatal class. Typically, the meal would be served halfway through the class. Of the four participants who attended prenatal classes at Teen Classes I, three of them had suggestions for changes relating to the timing of the meal.

> See that the lunch was in between the classes instead of right in the middle of the class...it should be at the end I think. 'Cause it's just, nobody gets back into it. It's a waste of time. (Kristen, 3.1)

> I would not serve [the meal] in the middle of the class. It just seems we do stuff at the beginning, then when they gave us the meal, I don't know, we'd go out for the whole rest of the class....You'd sit there wondering what else are they going to do? They should have had it at the end. Or lectured through the whole thing and kept talking, didn't stop talking when you're sitting there. When you're done, you're like can we go? Are we done? 'Cause we're like paying for parking and all that. Like it should have been left to the end 'cause what if someone doesn't want to eat, you're still sitting there. (Sheila, 7.1)

> Oh God yes! It [the meal] took a long time. Why didn't they just do it in the beginning and then do all our stuff, 'cause they always did it after and we were always so hungry....I don't understand how come they couldn't feed us during the presentation. 'Cause we were always really hungry during the presentation, like you know we'd have school and then we wouldn't have anything to eat, we'd go straight there, you know, knowing that we were gonna get supper there, but the timing was kinda off. (Barb, 8.1)

The adolescents in this study were able to describe changes to prenatal classes related to both content and process. Participants identified a need for more information on breathing during labor, baby care, postpartum changes and information for coaches. Participants also said there should be more sharing of experiences, visits by physicians and other teens, hands-on and practical experiences, and food provided at different times during the class.

Making the Transition to Parenthood

In Hospital

When discussing their labor-delivery and early postpartum experiences, participants described support in labor and ability to apply knowledge learned as positive influences. Negative influences described by participants included lack of information and intimidation by nurses.

Support in labor. Most participants stated they had several support people with them during labor-delivery. The most common support people were the participant's boyfriend and mother. Other sources of support included girlfriends and relatives.

> Even though he [my boyfriend] didn't go to the prenatal classes, he was the best support that I had. You know, he was like, come on Laura, breathe. He'd put a cold facecloth on my head and he'd stroke my hands and feel my hand, you know, feel it....He was more helpful than my mom. She was in there. I asked her to be in there 'cause I thought J. [my boyfriend] wouldn't be so much of a support to me, but he was actually really good. But, I don't know. I guess it made my mom feel special or something. (Laura, 1.1)

> I wanted him [my boyfriend] there. That worked well. But he just kind of sat in the corner and came and said hello to me. Well actually he was great, but he never helped out because I didn't, you know, he was a person I could get mad at. You know, just don't touch me. (Cathy, 2.1)

Ability to apply knowledge learned. Several participants described incidents in the hospital when they were able to successfully apply knowledge they had learned.

> She showed us pictures like about the dilation and stuff like that and what your contraction would be when you're so many centimeters dilated. I liked that 'cause when I was in labor I was forever looking. I had a pamphlet and it had that on there and I was forever looking, you know, I was timing my contractions. Oh I guess I'm about here, then. You know, or oh I have a long ways to go kind of thing. (Cathy, 2.1)

> It was really good [a video on breastfeeding] because I got to try it [breastfeeding] in the delivery room and it seemed like the baby knew what he was doing and I knew what I was doing. Great! (Laura, 1.1)

> Those videos they show in prenatal classes kept going through my mind when I was going through delivery (Barb, 8.1).

Lack of information. Four participants described incidents where they felt they had not received adequate information while in the hospital. Two situations occurred when the participants were bleeding in the postpartum period; two other situations occurred when the participants, who had been successfully breastfeeding their infant, did not receive information about breast pumping.

> They [the nurses] were scaring me with it [the possibility of a D&C], like I almost died. 'Cause I didn't know that could

> happen....I didn't know anything about it and I was so scared, like they'd come and tell me new things that I didn't know. (Cathy, 2.1)

> I was in hospital for the D&C, I couldn't breastfeed and that was something that I loved to do. Because it gave me and [the baby] a time to be close together. And that was, I was on so many drugs that I couldn't breastfeed....they ended up giving me like three shots of Morphine in twenty minutes. And they told me I could breastfeed in the morning, but when my mom brought him [the baby] back, I was so, still so drugged up, I couldn't hold him. I couldn't hold him, I couldn't change him. I couldn't do anything for like two days 'cause they had me so drugged up. (Karen, 5.1)

> I tried [breastfeeding] but it ended up she had to stay in hospital, so because she has a cyst in her back...so I had to stop breastfeeding and put her on the bottle the night before she went into Intensive Care. I was upset, that's what I really wanted to do. And then by the time she was out, my milk had already dried up, so my milk dried up real fast, like within three days. (Heather, 9.1)

Intimidation by nurses. Laura and Sheila described incidents regarding breastfeeding where they felt intimated by the nurses in the hospital.

> I told the nurse in ICU [NICU], call me when he's hungry, I'll feed him. I want to breastfeed him. She went, she fed him the bottle of Enfalac. I was so mad. I was like, I wanted to breastfeed him. And she kind of like had a real snotty attitude to me. I didn't want to fight with the nurses, you know maybe they know best or something like that. But I'm thinking you know, I want to breastfeed. I'm the mom. I want to breastfeed. So then the next day, she didn't call me in the morning. So so far, he's had two bottles, two feedings. And I didn't want him to get nipple confused. I was so scared that he was going to get nipple confused. So she went, and she called me for his lunch. So I went down there and he wouldn't latch on. I got so mad at that nurse. I was like, why did you bottle feed him?....It just really ticked me off that they went against my word, you know. It just made me really mad. And you know it's just such a shame that you know I can't breastfeed, because formula costs so much....he [the baby] had to stay in hospital for two extra days, so I lost a little bit of my milk, he wouldn't latch on, so now my milk's

> gone....The nurse in the nursery, he [the baby] was cold. So she wanted to give him a bottle to warm him up. And I said no, I want to breastfeed him. She goes, well okay. She went out of the room and she never came back. So I don't know if she gave him the bottle or what....You know, I felt like I didn't know nothing and all these nurses, you know, they have all this experience, they must think God I'm stupid or something like that. You know they must think that oh, I'm a total clutz and I'm going to make a bad mom or something. (Laura, 1.1)

> Like they gave her [the baby] too many bottles. Like they gave her two in the hospital 'cause she wasn't getting enough. Then she got all screwed up and then she'd get all upset and she'd start to scream, like the whole time....The first night, like I'd feed her and then she'd start to cry and she'd still want more, so they gave her a bottle. I figured the nurses know what's best. (Sheila, 7.1)

At Home

Almost all participants described the first few days at home with their baby as being difficult. Baby's crying, lack of sleep and isolation from friends were the prevalent sources of difficulty. Several participants experienced feelings of sadness and regret as they realized the loss of their former lifestyle and came to terms with the added responsibility of parenthood. As participants became able to recognize and respond to cues from their babies, the transition to parenthood became smoother.

Baby's crying. Most participants described the baby's crying as being a source of stress and frustration to them.

> Well I noticed with the first week that the baby was home, I was constantly getting mad at him. Why are you crying and stuff like that, you know. Kind of, I don't know, his crying used to annoy me....I just wasn't used to the crying and you know, I have to take care of this kid....It'd just actually really annoy me. You know, his crying was really annoying because you know it just bugs you. You know I put you down for a second and you start

> crying. You know I don't, I don't want to hold you. You know I don't feel like it right now, you know I want to go to sleep or something like that. It used to really annoy me. I found that I didn't have that much patience. (Laura, 1.1)

> I get scared that I'm not going to be able to give him a good life. And I think if I give him up then he would have a better life. That's usually when I start thinking about it, about when he's crying or something and I can't get him to stop. I think I'm an unfit mom and I can't do it. And then I get really scared. But I can't, I won't be able to give him up, he's my little baby. (Karen, 5.1)

Lack of sleep. Several participants stated that the lack of sleep, especially in the first few weeks postpartum, was a source of stress that made the transition to parenthood more difficult.

> Yea, tiring. Hard to get up in the middle of the night and feed her. That's the only time I don't get help, is in the middle of the night so it's hard to do that...'cause then I go to school in the morning. (Monique, 11.1)

> Oh God yes, oh yes it was so hard, like I'm so used to sleeping in and everything, I'm not used to getting up at three in the morning, or four in the morning to feed him or anything. I was not used to it at all and I started going out of my mind. It was very hard to get used to. I'm still finding it hard right now but I'm getting used to it slow but sure. (Barb, 8.1)

Isolation from friends. Several of the participants described isolation from friends as being a major source of stress influencing their transition to parenthood. For some, the isolation from friends was self-imposed due to a change in lifestyle since becoming pregnant. For others, the isolation from friends was due to absence from school. Only two of the participants had returned to school since having their babies.

> I'm not used to the kind of person that stays home, I'm used to the kind of person that goes out and does everything that you can possibly think of, you know I can do anything I feel like or whatever and now I'm just, I've done everything so, did everything in the books, covered every base, so I think it's just time for me to stay home....I just tell my friends that I don't want anything to do with them 'cause they're into drugs and alcohol and I'm not anymore. Ever since I became pregnant I quite drugs, I quit alcohol, I quit everything except for smoking....So my friends do drugs and alcohol, so I don't really hang out with them. (Barb, 8.1)

> Hectic. Stressful. I don't have time to myself anymore. I don't go out. I hardly have any friends because I never get a chance to go out....But when I do get the chance to go out, it's nice to have time to relax and not be a mother for just a second. (Debbie, 6.1)

Feeling the loss of previous lifestyle. Several participants describe feelings of sadness and regret over the loss of freedom and choice as they take on the added responsibilities of parenthood.

> That's what happens when you have a kid. You hafta [sic] become from a kid to an adult like overnight, pretty much. Within nine months, and then after the baby, like you still don't grow up really that much when you're pregnant. And then after when the baby's born, you hafta grow up like within a week, you gotta, it's really weird. Like I look at people on the bus and I just stare at them, and I'm like, they can go out after school, you know, they can go to a party, they can sleep over at their friend's house and stuff like that. Meanwhile, I'm stuck at home. You know, either that or I have to have money for babysitting. It's just weird, that they can just pick up and leave wherever they want to go, and I can't 'cause I've got something to take care of. Like in a way I like that, but in a way I don't. 'Cause I'm kind of tied down....When I get home, you know, I'm like I sit around, do nothing and stuff like that. (Laura, 1.1)

> I don't know, I was worrying about I'm a teenager and I have a child, like what am I gonna do for the rest of my life? I'm not gonna be able to be like be a teenager....it was just, I don't know, I'd go to bed at night and I keep on thinking, like my life is totally changed....I just felt different. Like I was afraid of being a mother.

> I still haven't quite accepted the fact, like it's still hard to believe, but I don't know. When I looked at her it was just like, why did I do this? Like, why did I have a baby? I was really depressed....it was hard to accept about being a mother and scary and I don't know, I was afraid of what my life would be like, like when I'm twenty I'm gonna have a five year old child, like it's gonna be really different. (Diane, 10.1)

> I don't feel like I'm a mother yet though. Like I love her so much, I couldn't imagine my life without her, but I don't feel like I'm a mom, like to me, I feel to me, mom is my mom, you know it's weird. It is, 'cause I don't feel like a mom, even though I love her so much and I just don't feel like a mom yet, like the word mom just scares me. My mom says you don't feel like a mom until they start calling you mom, so, I don't, it's all so different to me, it's all new and some things I find very hard, like I'm still trying to get the hang of bathing her, but 'cause I'm so scared, she's so fragile and I'm gonna break her and that's the same with undressing her too, 'cause when she has clothes on I can handle her fine, but when she's naked, it feels like she's so breakable, like it's just so different. (Heather, 9.1)

Getting used to baby. Participants shared with the researcher that as they became better at recognizing and responding to the baby's cues, the transition to parenthood became easier. Cathy's comments typify the feeling that the transition to motherhood wasn't immediate.

> Well, we both admit this to each other now. We didn't love her at first. Like we, we might have, but we didn't think it was enough love. I don't think it was love, well for us it wasn't a given, you know, just boom, oh you love her right away. It wasn't at all. And oh everybody says that. But what are you going to say? You're not going to tell everybody, oh I had to grow to love her....But I always feel like, do I love her, do I want to give her up, and I want to, am I going to want to give her up in a year, you know. Like I was scared, like I thought you had to, like for myself and my boyfriend, we had to grow into it....It's not that I didn't love her at first. I loved her, I did. But it just, well to myself I knew that it wasn't the right kind of love, you know....I was scared, like oh J. [my boyfriend] what is he going to say if I tell him? Like, so I didn't tell him. But then in the end, like now that

> we both know that, we realize that we do love her very, very much. We kind of told each other, like I didn't love her at first, did you? (Cathy, 2.1)
>
> I'm still finding it hard right now but I'm getting used to it slow but sure....I was like well you know, I'll feed him, maybe that's what it is. I'd stick my finger in his mouth and if he sucks, then I'll know that he's hungry, so I'd give him a bottle and everything, and he's still crying and I give him his soother and he's still crying and he goes to sleep. I never understood that. (Barb, 8.1)
>
> When you see her, her first smile, her first little touching of face, her opening her hands. And you just, oh! It's wonderful....when she first started staying awake for the longest time, when she at first, you can tell that she can see better. And she follows you across the room....But now it's okay, she's cool. She's a great baby. (Liz, 4.1)

In summary, from the perspective of the adolescents interviewed, a description of their perceptions of and experiences with prenatal classes can be generated. The findings from this study indicate that participants were motivated to learn and attended prenatal classes mainly to find out about labor and delivery and to be assured that everything was normal. Participants varied in their opinion of the importance of prenatal classes to teens, but most felt that teen-only prenatal classes were a good idea. Other sources of information included family, friends and other pregnant teens. At prenatal classes, participants felt they learned about the fetus, labor-delivery and some information about baby care, but not enough about themselves both during and after pregnancy.

Most participants did not feel prepared after taking prenatal classes. Barriers to learning included denial of the reality of their situation, not recognizing a learning need and difficulty asking questions.

Preferred teaching-learning methods were visual, hands-on and realistic. Non-preferred teaching-learning content included too much review and repetition especially related to nutrition and too much focus on baby. Non-preferred teaching-learning methods included being lectured to, lack of input, use of the overhead projector and out-dated or overly vivid videos. Suggestions for change in content areas included more information on breathing during labor, baby care, postpartum changes and information for coaches. Suggestions for change in process areas included more sharing, hands-on and practical experiences, and physicians and teens speaking to the class.

In making the transition to parenthood, positive influences included receiving support, applying knowledge learned and getting used to the baby's cues. Negative influences included not receiving information and feeling intimidated by nurses. The baby's crying, lack of sleep and isolation from friends were sources of stress in the early postpartum period.

CHAPTER V

DISCUSSION, CONCLUSIONS AND IMPLICATIONS

> **"No human experience is at once so transiently private and lastingly public as an unintended pregnancy. When the mother herself is a young adolescent, only partially educated and almost wholly economically dependent, the pregnancy is inevitably enmeshed in a ragged tapestry of personal, interpersonal, social, religious, ethical, and economic dimensions."**
>
> **(Hayes, 1987, p.xiii)**

The purpose of this study was to describe adolescents' perceptions of and experiences with prenatal classes. In this chapter the research findings will be discussed as they relate to the research questions and existing literature. The framework used for organizing the discussion chapter will be based on the categories suggested by Nichols and Humenick (1988): the learner, teacher, content and process. Conclusions, implications for nursing practice, indications for further research, and limitations of the study will then be presented. A brief summary completes the chapter.

The eleven primary participants who participated in this study were able to clearly identify and articulate their perceptions of and experiences with prenatal classes. This is consistent with the findings of other researchers who have found that adolescents, when asked, often are able to identify a well-defined and interpretable set of interests (Bachman, 1993; Giblin, Poland, & Sachs, 1986). Many commonalities existed among the participants in this study, including a motivation to learn, identified learning needs, and preferred and non-preferred teaching-learning methods.

The Learner

The major findings of this research study related to the learner are that participants had common developmental characteristics typical of middle adolescents. These characteristics included concrete thinking, present-orientation, egocentrism, narcissism and striving for a sense of identify. Participants demonstrated a readiness to learn in that they were motivated to learn and readily sought out experiences to meet their learning needs. However, participants differed in their experiential readiness as their background of experiences, especially the presence and amount of stress and support impacting on them throughout their pregnancies, varied considerably.

Participants preferred to learn in small groups, preferably with other teens, although they warned that 'all teens are not the same' and wanted the uniqueness of their situations recognized by others. They believed that prenatal classes were a valid source of information and attended prenatal classes with the expectation that their learning needs would be met. Participants expected to learn about the physical and emotional changes associated with pregnancy, especially how and when their bodies would return to normal, what to expect and how to cope with labor and delivery and about postpartum depression.

Barriers to learning included denial of the implications of their situation, not recognizing a learning need, and difficulty formulating and asking questions. While participants felt they gained knowledge from attending prenatal classes, most did not feel prepared for labor and delivery or baby care.

Developmental Characteristics

The learners in this research study were middle adolescents (14 to 17 years of age) and thus had common developmental characteristics that influenced their learning. As discussed earlier, middle adolescents tend to be concrete thinkers, concerned with the here and now, egocentric, narcissistic and striving for a sense of identity in the company of peers. These developmental traits were evident as the participants described their perceptions of and experiences with the prenatal classes they attended and will be discussed throughout this chapter as they relate to the teacher, content and process.

Readiness to Learn

Readiness to learn is an important prerequisite to learning and is dependent on the person's physical, mental and emotional state (Rover, 1987). The two components of readiness to learn include motivation, or the individual's willingness to put forth the effort to learn, and experiential readiness, which refers to the individual's background of experiences, skills and attitudes as well as his or her ability to learn. All participants in this study demonstrated a motivation to learn, but varied in their experiential readiness.

Motivation to Learn: The adolescents in this study demonstrated a motivation to learn and actively sought out learning experiences. Although participants were often informed of and encouraged to attend the prenatal classes by others, they attended and participated in the classes voluntarily. Most of the teens attended all of the classes offered, and in fact four of the participants chose to attend a second set of classes (Appendix F). At Teen Site 1, attendance at prenatal classes did not involve additional travel or cost and the classes were held during the school day. At the other two sites, however, travel, cost and time were factors, yet the adolescents still attended willingly.

Participants said that they went to prenatal classes because they were scared, didn't know what to expect and wanted to be prepared. The threat of impending labor was cited as being the main motivating factor for attending prenatal classes. Participants who were scared and feared the pain of labor and delivery tended to describe attendance at prenatal classes as "very important". This is consistent with the Health Belief Model which states that individuals are not likely to take health action unless they view something as threatening and expect that by taking health action, they can decrease either their susceptibility to or severity of the threat (Redman, 1993).

Participants also were motivated by wanting to be a 'good mom' as they expressed concern and sought information about the effects of nutrition, drugs and alcohol on their unborn babies. The feelings of vulnerability and protectiveness towards their fetus' seems to be experienced to varying degrees by all pregnant women (Ball, 1987; Bergum, 1989). In fact Rubin (1975) describes the giving of oneself and protecting the well-being of the unborn child as essential tasks that a woman must achieve in the prenatal period in order to establish an identity as a mother. Failure to achieve these tasks of pregnancy can interfere with the woman's ability to establish a caretaking relationship with her baby and adapt to future parental roles (Cohen, 1979; Raphael-Leff, 1982; Rubin, 1975; Tanner, 1969).

Learning theorists propose that times of transition and major change can be optimal times for learning. Caplan (1961) views pregnancy as a time of psychological change and thus a time to promote learning and competency in an individual. Koch, Mancy, and Susman (1993) argue that adolescence offers a 'window of opportunity' for changing adolescents' beliefs and perceptions about their health behaviors, attitudes, and values. Participants in this study were facing the simultaneous crises of pregnancy and adolescence, both times of transition and major change, and were motivated to take advantage of this time for learning.

Experiential Readiness: Although participants shared the commonalities of middle adolescence and pregnancy, diversity existed. Participants varied in age, formal education, learning style, and social, economic and cultural circumstances. According to Hayes (1987), part of the reason policy makers lack a coherent approach when designing adolescent programs, is because "adolescents are not a monolithic group, and adolescent pregnancy is not a unitary problem" (p.2). The values, norms and expectations influencing the adolescent's behavior and attitude may vary sharply, as may the meaning of early sexual activity, pregnancy and childbearing to the adolescent.

Participants varied in age from 14 - 17 years of age, in formal education from grades 8 - 10, and in socio-economic status. Some participants viewed school and learning as positive, while others related past negative experiences with both. It cannot be assumed that formal level of education necessarily implies reading and/or comprehension abilities. Although all participants had completed grade 7, their varied experiences with school and learning influenced their learning preferences. One participant who described past negative school experiences, preferred to work one-on-one with the teacher as she found it hard to follow a class discussion. Other participants said they didn't like the learning environment to feel like school.

Participants were not asked to identify their learning style, but rather to think of a class they had enjoyed and describe how they preferred to learn. Ostome, Hoozer, Scheffel and Crowell (1984) differentiate learning style and learning preference. Learning style is "an attribute, characteristic, or quality of an individual that interacts with instructional circumstances in such a way as to produce differential learning achievement" (p.27), while learning preference is one aspect of learning style and "relates to the likes and dislikes that individuals have for particular sensory modes and conditions of learning, including preferences for certain learning strategies" (p.27). Although participants in this research study varied in their preferences for group, one-on-one, or individual learning, all participants preferred concrete, visual and hands-on learning experiences that were realistic and relevant to their present circumstances. This is consistent with the findings of other researchers. Titus, Bergandi and Shyrock (1990) investigated adolescent learning styles among high school students by means of Kolb's Learning Style Inventory and found that adolescents, especially young adolescents, are not nearly as abstract in their learning style as adults, but are similar to adults in the degree to which they are active and reflective in their learning. Titus, et al. concluded that learning experiences which have a concrete component within them are those most likely to match the characteristics of the adolescent learner.

The majority of participants in this research study liked being with other teens during prenatal classes as they felt they could relate to teens better than to adults. Several participants said they felt awkward being young and single in a group of 'happily married couples' and felt they were judged and looked down upon. Interestingly, the older adolescents did not prefer teen-only prenatal classes but rather saw some benefit from also interacting with older women. They pointed out that 'all teens are not the same' as personal circumstances, stressors and maturity level varied. Younger participants tended to want to talk about concerns about their boyfriends and mothers, while the older participants found this boring and not relevant and rather described concerns about finances, living arrangements and school. Participants who were no longer in a relationship found it awkward to see other teens with their boyfriends.

Participants were also dealing with different personal stressors during their pregnancies and had varying amounts of support available. Isolation from and rejection by friends, family and boyfriends were realities for many of the participants. As well, several participants experienced some form of abuse during their pregnancies. The adolescents had varying concerns about finances, living arrangements, school, boyfriends and parents. The adolescents who described multiple stressors also described feeling 'not prepared' following prenatal classes. The presence of multiple stressors may influence the adolescent's identified learning needs and readiness to learn. According to Maslow, the basic physiological and safety needs must be met before attention can be given to the higher needs of love and belonging, self-esteem, gaining respect and esteem from others, and self-actualization. Passino, Whitman, Borkowski, Schellenbach, Maxwell, Keogh and Rellinger

(1993), suggest that adolescent mothers with adjustment problems often need to address their own personal needs before being able to adjust to the demands of parenthood and the needs of their infants.

The adolescents in this study believed it was important that the uniqueness of their situation be recognized as 'it's not the same for everyone'. Each teen brought with them their own personality, needs and set of circumstances. The fact that they were middle adolescents gave them some common ground, but their unique circumstances still needed to be recognized and acknowledged.

Quest for Information

Participants described wanting information and although they had other sources of information available to them, regarded prenatal classes as a valid source of information and a good idea for pregnant teens. Other researchers have also found that adolescents seek information from health care professionals (Levenson, Smith, & Morrow, 1986).

When participants described what they expected to learn from prenatal classes, they focussed on the need to understand the physical and emotional changes associated with pregnancy and to know what to expect about labor and delivery. These findings are consistent with those of other researchers who have identified informational priorities of adolescents attending prenatal classes (Bachman, 1993; Copeland, 1979; Giblin, Poland, & Sachs, 1986; Howard, 1985; Levenson, Smith, & Morrow, 1986; Porterfield & Harris, 1985; Smith, Levenson, & Morrow (1985). Interestingly, Maloney (1983) surveyed adult women who had attended prenatal classes and found that these topics were also identified as priority informational needs.

When asked to elaborate, participants identified the need to know not only what was happening to them physically and emotionally during the pregnancy, but also how and when their bodies would return to normal. Although pregnancy is a time when all pregnant women tend to become inwardly directed and to focus on themselves and their personal concerns (Leppert, 1984), concern about body image is of paramount importance to the adolescent who is struggling with the changes of pregnancy while also coming to terms with the changes of adolescence. Participants identified a need to be assured that not only is this change normal, but am I normal? While the need for reassurance is common in all pregnant women, adult women tend to focus on the normality of the changes and not on the normality of self. According to Mitchell (1992), concern about normality is common in adolescents. As adolescents strive to develop a sense of identity, they are challenged by the need to maintain consistency or continuity while attaining individuality or differentiation. Mitchell defines continuity as "the persistent sameness of character that allows us to be the same person from day to day" (p. 121), while differentiation is the process by which we become different from others. The adolescent needs assurance that they can be both: different, but not too different; unique, yet still normal. Thus the pregnant adolescent's concern for normality may be rooted in the developmental task of striving for identity.

When asked to elaborate on what they expected to learn about labor and delivery, participants sought very specific, concrete information about how they would know labor was starting, how long it would last, what it would feel like, what would happen during their labor and how they could cope with the pain. This is consistent with other research findings with both adolescent and adult women and with patients in general. Researchers have found that when asked about pre-operative and post-operative teaching, patients identify a desire to know what to expect, what will happen, what it will feel like and how long it will last (Long, Phipps, & Cassmeyer, 1993; Lorig, 1992).

Only two participants expected to learn anything in prenatal classes about the postpartum period. These participants said that they wanted to learn about postpartum depression as they had heard from others that this often happens. Other participants said they didn't expect to learn anything in prenatal classes about the postpartum period and had not really thought about this time period. Participants did not identify expecting to learn about baby care in prenatal classes. Other researchers who have asked adolescents to identify learning needs at prenatal classes have also found that adolescents focus on labor and delivery and rarely request information about child care or birth control (Copeland, 1979; Porterfield & Harris, 1985;

Timberlake, et al., 1987). Interestingly, in the postpartum period participants expressed a desire to learn about baby care and postpartum changes. Perhaps it is the timing of the presentation of information that is important. As adolescents are concrete thinkers and have difficulty thinking about future events, baby care and postpartum changes should be presented early in the postpartum period, not in the prenatal period.

All but two of the participants seemed unable or unwilling to consider future oriented information, but rather were interested in learning about information that had immediate applicability. This is in contrast to adult pregnant women who, although focussed on the prenatal period up to and including labor/delivery, also wonder about the postpartum period and express interest in learning about and preparing for the arrival of the baby and the early postpartum period. As the pregnant adult develops confidence in her ability to cope with the process of childbirth, she is able to devote increasing attention to the tasks of parenthood and the needs of the expected infant. Thus the pregnant adult is often receptive to parenting information in the third trimester of the pregnancy (Maloney, 1985; Nichols & Humenick, 1988).

Barriers to Learning

Prolonged Ambivalence: Several participants in this study experienced ambivalence about the pregnancy well past the first trimester and for some the ambivalence continued throughout the pregnancy. Although participants did not specifically identify or articulate what parenthood meant to them, concern was expressed as to how having a baby might affect their lifestyle and their relationships with others, especially peers. According to Caplan (1957), ambivalence is a common emotional response of pregnant women early in the first trimester but is usually replaced by acceptance by the end of the first trimester. Continued ambivalence about the pregnancy can interfere with the expectant mother's ability to think about and plan for the baby's arrival and to accomplish the tasks associated with pregnancy that are needed for maternal identity.

Although abortion was initially considered by several of the adolescents in this study, they all carried their pregnancies to term and kept their babies. The wish of their partner was found to be a strong motivator for either seeking abortion or continuing the pregnancy. According to Brown and Urback (1989), of adolescents who continue their pregnancies, most decide to keep their babies as they want to parent and have a baby to love. During the decision making process, adolescents often dismiss other options with indifference, without looking at the reality of their current life, or life with a baby. The adolescent's egocentrism results in the decision being heavily swayed by their fantasy of a baby and their imagined life as a parent. Several participants said they wanted a baby of their own to love.

Denial and Not a Recognized Learning Need: All participants expressed shock and disbelief when they first found out they were pregnant. Although none of the participants had been using birth control consistently, all expressed disbelief that they had gotten pregnant, 'thinking it couldn't happen to me'. The feeling of immunity to the consequences of behavior is commonly found among the adolescent population (Adams, 1983; Elkind, 1984; Mitchell, 1992). Mitchell (1992) found that pregnant teens tend to use an array of fables or fictions to describe why they thought they would avoid pregnancy. Such fictions as "it just couldn't happen to me", "I'm too young", and "I didn't have sex often enough to become pregnant" are used by the adolescent who wishes to deny unwanted information (p.44). For several participants, the denial continued for some time into the pregnancy and resulted in a delay in telling others and in seeking medical care.

Denial of the implications of their situation was apparent when participants believed they did not need to learn about baby care but rather could rely on maternal instinct and past experiences with babysitting as adequate and sufficient preparation for full-time motherhood. Brown and Urback (1989), in their research with pregnant and parenting teens, found that a gap often existed between the adolescent's expectations and the reality of parenting. The adolescents in their study stated that they expected parenting to be easy and, based on their babysitting experience, manageable. They found, however, that in reality parenting was not easy, the twenty four hour responsibility was overwhelming and that they were parenting with little or no help or support. Brown and Urback's findings were supported by data in this study. Participants described feelings of frustration, isolation and overwhelming responsibility in the early postpartum period.

Pfeefferbaum and Levenson (1982) found that denial is a defense mechanism commonly used by adolescents in crisis to camouflage real concerns. Mitchell (1992) points out that denial is not always to be considered negatively as it may reflect a desperate hope versus a distortion of reality. He feels that the adolescent may not be denying the situation but rather avoiding some of the more threatening implications and that temporary denial can be an effective coping mechanism, especially if the realities are too great. Denial of the pregnancy and of their learning needs may have enabled participants in this study to deal with the crisis of their situation one step at a time.

Difficulty Asking Questions: Participants stated that they found it difficult to identify what it was they needed to know ('I don't know what I don't know') and to ask questions in front of the group. Concerns were expressed about not knowing how to put their questions into words, feeling scared and shy, and being afraid that other members of the class wouldn't be interested in the questions they had. Mitchell (1992) feels that adolescents' heightened self-consciousness is based on their misperception that they are always being watched, evaluated, sometimes applauded and often scorned by others. This 'imaginary audience' is yet another manifestation of the adolescents' egocentrism. The adolescent who is also pregnant may feel especially conspicuous and self-conscious.

Not Feeling Prepared

Although participants were able to identify many informational gains, only one participant felt prepared for labor and delivery and baby care after taking prenatal classes. Other researchers have found that attendance at prenatal classes is often associated with women feeling more prepared for the labor and delivery experience, but not necessarily for parenting (Broome & Koehler, 1986; Freda, Andersen, Damus, & Merkatz, 1993; Hetherington, 1990; Kyman, 1991; Maloney, 1985; Rautava, Erkkola, & Sillanpaa, M., 1991). Nichols and Humenick (1988) stress that prenatal education involves more than increasing an individual's knowledge base, but also involves that acquisition of "coping skills that will increase their competence in the pregnancy, childbirth, and early parenting experiences" (p.2). It would appear that development of coping skills was not achieved by the adolescents attending prenatal classes at any of the three sites.

The Teacher

The major findings of this research study related to the teacher are that participants liked and wanted a teacher who was democratic rather than autocratic or laissez-faire, avoided unnecessary repetition, accounted for learners' prior experiences, matched content taught with identified learning needs and provided ongoing feedback.

Participants liked and wanted a teacher who was personable, participated in the learning experience, was responsive to learner needs, provided choices, allowed input, shared her own experiences, provided feedback and had fun. Potter and Emanuel (1990) found in their research with junior and high school students, that student satisfaction was positively correlated with instructor expressiveness. Instructor expressiveness included the use of humor, self-disclosure and storytelling. Other researchers have found that learners of all ages like a teacher who uses humor and storytelling as long as the relevance to the learning experience is clear (Apsy & Roebuck, 1977; Catrone & Sadler, 1984; Davis, Brucker, & Macmullen, 1988; Stanton, 1985). Interpersonal skills of the teacher are seen as being crucial to instructional effectiveness (Redman, 1993; Whitman, Graham, Gleit, & Boyd, 1992). In fact, researchers suggest that poor interpersonal skills in a teacher can actually nullify the effects of health instruction (Kolbe, Iverson, Kreuter, Hochbaum, & Christensen, 1981; Whitman, et al., 1992).

Participants liked the teacher to ask for and respond to their input and learning needs. Participants also wanted their partners' included in the teaching/learning process. Two participants expressed irritation that their partners' learning needs were ignored during the prenatal classes. Participants did not feel it was appropriate for the teacher to rely solely on identified learner needs as often the adolescent 'didn't know what I didn't know'. This is consistent with the findings of other researchers who have found that adolescent learners want input and direction from the teacher and prefer a democratic rather than an autocratic or laissez-faire teacher (Ostmoe, 1984; Potter & Emanuel, 1990; Redman, 1993). Nichols and Humenick (1988) describe a democratic teacher as one who allows the group to participate in setting goals and determining activities, guides the actions of the group and acts as a resource, and strives to achieve a balance between giving direction when necessary and allowing the group the freedom to grow (Nichols & Humenick, 1988).

Participants did not like unnecessary repetition and found that prior learning and experiences were often not accounted for by the teacher. Participants who had previous babysitting experience were not asked what they knew or remembered. Participants found content related to nutrition and conception especially boring and repetitive because they'd heard it all before in school. The adolescents also found it problematic when the teacher would repeat information from the previous class before moving on to new information. Although repetition can be useful to ensure that learners have grasped previously taught material before moving on to new material, asking learners what they remember or quizzing them are preferred strategies to assuming they don't remember anything and repeating it all (Lorig, 1992). Participants had recently been in school and had received varying amounts of information about nutrition, contraception, conception and human development. Assuming that they were coming to prenatal classes with little or no previous knowledge in these areas resulted in unneeded information being presented to them.

Knowles (1980), identified several characteristics of adult learners that must be considered when teaching adults. Although adolescents are not yet adults, they are no longer children. Thus several of these characteristics are relevant to consider when designing and teaching childbirth education classes to adolescents. According to Knowles, the adult learner "has previous experiences that serve as rich resources for learning and wants to learn things that have immediate application" (Nichols & Humenick, 1988, p.424). The teaching/learning experience can be enhanced if the teacher relates new class material to the learners' past experiences, builds on previous knowledge, provides opportunities for learners to serve as resources to each other, and presents information that the learners can immediately use in life situations.

When asked what sort of information they learned about in prenatal classes, participants focussed on information about labor and delivery, growth and development of the unborn baby, nutrition and reasons to avoid drugs and alcohol during pregnancy, involution, depression, and how to feed and bathe the baby. This closely corresponds with the information they had expected to learn. The exception was that although participants hadn't expected to learn about the baby, they had in fact learned about feeding, especially breastfeeding, and bathing the baby. What participants remembered about the information they learned in prenatal classes closely fit with the questions that concerned them most before going to the classes. This is consistent with Gestalt-Field learning theory whereby behavior is directed toward goals and need fulfilment; if a need is identified and teaching is directed toward meeting that need, learning is more likely to occur (Nichols & Humenick, 1988).

Participants also identified the need for ongoing feedback throughout the teaching/learning process. One participant said that she especially liked it when, during breathing exercises, the teacher came around to each learner individually and let them know if they were doing it right. DeYoung (1990) defines feedback as an exchange of information aimed at increasing the learner's confidence while improving their competence and compliance with the learning activity. Feedback should involve an exchange of information, thus the teacher should provide feedback to the learner and the learner should be provided with the opportunity to provide feedback to the teacher. Failure to elicit feedback from the learner may result in the teacher assuming that the content and strategies are effective and meeting the learning needs. Too often teachers rely solely on asking learners to evaluate the course upon completion. Research shows that evaluation elicited at the end of a course often inaccurately reflects the learners true feelings (Redman, 1993).

Accurate feedback is more likely to occur when the learners feel they may derive some benefit from the feedback they give.

The Content

The major findings from this research study related to content are that participants wanted to know about emotional as well as physical changes, what to expect and how to cope during pregnancy, labor/delivery and the postpartum period; they wanted more information on and practice with baby care; they often knew the 'what' but didn't know or understand the 'why'; and their informational needs changed throughout the prenatal classes. Participants specifically wanted more information on breathing techniques to use during labor, practical information and realistic expectations about baby care, and physical and emotional changes to expect in the postpartum period.

Participants in this study wanted to know about the emotional changes they experienced throughout the antepartum and postpartum period. Participants also wanted to know about what would happen, how they'd feel and how they'd cope during labor rather than focussing on the stages, phases and mechanisms of labor. This is consistent with the findings of other researchers who have found that a discrepancy often exists between what learners want to know and what health care professionals think should be taught in prenatal classes. Health professionals tend to emphasize the physical aspects of childbirth while expectant parents often want to know about the emotional aspects of childbirth and want their fears and anxieties about pregnancy, labor and birth alleviated (Bachman, 1993; Howard & Sater, 1985; Levenson, Smith, & Morrow, 1984; Maloney, 1985; Porterfield & Harris, 1985; Rovers, 1987).

Two participants did express a desire to learn about postpartum depression as they had heard from others that this often occurs. Research has shown that adolescent mothers do have a high incidence of depression in the postpartum period often due to difficulty adapting to the new role of motherhood (Cooley & Unger, 1991; Dormire, Strauss, & Clarke, 1989; Giblin, Poland, & Sachs, 1987; May, 1992; Zuckerman, Walker, & Frank, 1984). Several participants described feelings of sadness and regret over the loss of freedom and choice and isolation from friends. Altendorf and Klepacki (1991) found that many new adolescent mothers experience many of the classic symptoms of grieving as described by Dr. Kubler-Ross and that the loss they experience may be due to loss of freedom, former lifestyle and friends. Adolescents in the postpartum period may move back through the grieving process as their prebirth expectations clash with the postbirth realities.

Participants did not indicate a need to learn about birth control or contraception in prenatal classes. Although many adolescents receive information in school or at home about conception and contraception, research findings indicate that adolescents often have misconceptions about contraception, conception and pregnancy. They may have information, but are often unable to apply it to their present circumstances (Podgurski, 1993). Levenson, Smith and Morrow (1986) argue that if the adolescent is not yet able to think abstractly and thus unable to think about future consequences and simultaneously consider alternatives, the value of using birth control may seem obscure and not a priority. Other researchers have also found that adolescents seldom identify information about birth control as a priority learning need in prenatal classes (Bachman, 1993; Copeland, 1979; Giblin, et al., 1986; Levenson, et al., 1986; Porterfield and Harris, 1985; Reedy, 1991). Interestingly, two participants specifically asked about sex and birth control in the early postpartum period. Perhaps now that the adolescent has experienced the reality of a pregnancy, she will be more likely to be able to admit that she is sexually active and in need of information about birth control. Again the timing of the information is important - the early postpartum period is more appropriate as the adolescent is more likely to recognize a learning need and be receptive to the information.

Repeatedly participants wanted to learn more about themselves and not always focus on the baby. Participants wanted more information on changes they would go through in the postpartum period, including bleeding, mood swings, how and when their bodies would return to normal and feelings related to sex. Other researchers have found that adolescents typically rate self-oriented topics as being very important (Davis, et al., 1988; Drummond & Hansford, 1991). Perhaps once the adolescent feels that she is being seen as important and her needs as relevant, she will be better able to move on to learn about her baby. Focussing on how the adolescent can be a good mother rather than on what she can do for her baby, places more emphasis on her importance as a person and more likely meets her need for recognition and attention. Howard and Sater (1985) suggest having the adolescent think of 'ways to make my baby happy and be a good parent' and then have her move on to thinking of 'habits I can improve'. This strategy emphasizes the positive things the adolescent is doing, helps build her self-esteem and confidence, and better enables her to address some of the things she may then need to improve on.

Although participants had initially felt uninterested in learning about baby care in prenatal classes, all of them found the early postpartum experience stressful and identified their need to learn more about baby care in prenatal classes. Participants identified wanting practical suggestions and realistic expectations for caring for their babies, especially how to hold, feed and settle a baby. Participants felt particularly unprepared for the change to their lifestyle, the sleeplessness and especially the baby's crying. Young (1988) argues that although the egocentric adolescent may be loving and find satisfaction in daily infant contact, she is often unable to understand the needs of her infant for adequate nutrition, safe care, stimulation and nurturance. As the adolescents in this study found they could recognize and respond appropriately to their baby's cues, the stress seemed to decrease. Drummond (1993) found that almost all first-time mothers in her study described their infant's crying as stressful, especially in the first few weeks postpartum, and that the stress decreased as they were able to recognize the reason for their baby's cry and respond in ways that soothed the baby. Gottlieb (1978) states that the mother's ability to interpret her baby's actions by giving meaning to them is an essential step in the process of a mother accepting her newborn baby. Other researchers have also identified the importance of the mother learning to cue in to her infant's behavioral cues as an essential part of effective parenting (Anastasiow, 1983; Ludington-Hoe, 1977; Mercer, 1983). These topics could be offered in the early postpartum period either in the hospital or community as parenting classes.

Several participants commented that, although they had heard information about nutrition, drugs and alcohol during pregnancy, they had not understood how these actually affected the developing baby. Hearing things again, but more in depth, and hearing how this information related to their present circumstances seemed to enhance learning. Whitman, et al. (1992) support this approach to teaching and emphasize the importance of problem-oriented teaching/learning, where the teacher and learner discuss both the 'why' and 'how' of information presented: for example, 'here is the information, this is why it occurs and this is how it may apply to your situation'. Subject-oriented teaching, in contrast, is where the teacher tells the learner the 'what': for example, 'this is the information I think you need to know'.

Participants who attended prenatal classes at Teen Class I and General Prenatal had not been given the opportunity to have input into content to be covered. Participants who attended prenatal classes at Teen Class II completed a learning needs assessment at the beginning of their first class. Several learners from this class, however, said that although they had been asked for their input, they felt it was ignored by the teacher. While participants liked being able to have some choice as to course content, they also felt they 'didn't know what they didn't know'. When the agenda is set either by the teacher before the class/course even begins, or at the beginning of the class/course with student input, the assumption is made that learners are able to identify and articulate their learning needs and that the learning needs identified at the beginning of the teaching session will be unchanged over time. The teaching/learning experience itself may bring forth learning needs that neither the teacher nor the learner realized existed. As well, learning needs change over time as circumstances surrounding the learner change. Participants identified the importance of being able to discuss issues as they came to mind or became relevant, regardless of whether these issues were part of the teaching plan for that day. In some teaching situations, flexibility with the teaching plan may be difficult as essential or core content may need to be discussed. The teacher needs to clearly communicate to the learners the content that must be discussed. She/he can then be flexible around other content areas. Nichols and Humenick (1988) suggest the teacher compromise and include information she/he considers essential, as well as information of high interest and importance to the learners even though the teacher may consider it nonessential. Addressing issues relevant to the teenage father/coach may help maintain their involvement in the prenatal classes and ultimately in the pregnancy. Researchers have found that the greater the adolescent father's knowledge of maternal and infant development and care, the more supportive behaviors he demonstrates toward the mother and expected infant (Barth, Claycomb, & Loomis, 1988; Elster & Panzarine, 1981; Kiselica, Stround, Stround, & Rotzien, 1992; Westney, Cole, & Munford, 1988).

The Process

The major findings in this research study related to process are that participants liked and wanted a variety of teaching and learning activities, realistic visual aids and hands-on experiences, small group work with a lot of interaction, guest speakers, especially physicians and adolescent mothers, and food to be provided. Participants did not like teaching/learning approaches that were too much like school, the use of the overhead projector, videos that were too vivid or outdated, not having input and anything that was 'boring'. Participants identified wanting and needing more opportunities for other adolescents to visit the class and share their experiences about labor/delivery and their babies, more practice with breathing exercises to use in labor, and more hands-on and practical experiences with baby care.

While participants described liking a variety of teaching and learning methods and approaches, they preferred the use of realistic visual aids and hands-on experiences involving the learners, and disliked 'being talked at'. According to Nichols and Humenick (1988), women in prenatal classes tend to prefer a variety of learning activities rather than any one particular learning activity over another. Reedy (1991) stresses that adolescents tend to learn best through multiple pathways. Learning activities that involve listening alone are least effective in promoting learning with adolescents, while learning activities that involve listening with visual aids in multiple formats (e.g. slides, films, colourful charts and models) are most effective. Participants said they liked hearing information 'more in depth' but found hearing the same thing over and over again 'boring' and a 'waste of time'. Ostmoe (1984) suggests that learning is enhanced when both verbal directions and images are used to present the learning task; adolescents tend to have short attention spans and are easily bored thus fast paced learning with multiple activities focused on the same concept often provides the adolescent learner with needed variety and reinforcement. Reinforcement focuses more on presenting the same information in different ways and is different from merely repeating the same information over again.

Participants liked and wanted teaching strategies that were realistic, visual and hands-on. Seeing a 'little breast' and a 'little sac with a pretend baby in it', bathing a real baby and trying out the labor/delivery bed were mentioned by participants as things that happened in the prenatal classes that they particularly liked. Other researchers have also found that both adult and adolescent learners prefer teaching strategies that are realistic, visual and hands-on (Catrone & Sadler, 1984; Garity, 1985; Ostmoe, et al., 1984).

Visual aids that participants liked included pictures, charts, models, pamphlets and videos. Adolescents tend to be concrete thinkers and thus have difficulty abstracting information. Using visual aids that are as realistic as possible provides the adolescent learner with concrete visual images of the information or activity to be learned and can enhance the process of encoding and storing of information (Dusek, 1991; Redman, 1993). Other researchers have also found that using visual aids helps maintain interest and decrease the stress of learning information such as anatomy and physiology (Bachman, 1993; Timberlake, et al., 1987). If models of anatomical structures are used they should be to scale as the adolescent learner may otherwise have difficulty imagining actual size. Reedy (1991) found that written materials for adolescents work best if they are colorful, use simple vocabulary and have more pictures than words. Many adolescents' literacy skills are not well developed, thus written materials should include a limited amount of information and be geared to readers with a grade 4 vocabulary. Podgurski (1993) found that adolescents chose brochures and reading materials based on color, attractiveness and recommendations of friends, rather than on their perceived need for the information. Redman (1993) recommends that handouts be given after the information has been formally presented in class unless the learners are to use them during class, otherwise the tendency is to spend the class time looking at the brochure rather than listening to the discussion.

Participants liked videos that were realistic, up-to-date and depicted teens rather than adults. Although several participants found the videos unrealistic and made labor look too easy and "like a piece of cake", others were upset and complained that the scenes showing delivery were "too realistic". Prendergast and Prout (1990) reported that teachers and students described films showing actual deliveries as "bloody" and "gory" and "too real" (p.138). Presenting too many images quickly may overwhelm the adolescent learner. One participant said that she liked "little videos", short videos that didn't present too much information at one time. Perhaps starting and stopping videos, only showing certain segments, providing explanation prior to the video, or using slides may help ease the impact while still presenting a realistic visual image. Adolescents are linear thinkers and need information presented sequentially. One participant said that she had heard about fetal growth and development, but was amazed when she could see the development "slide by slide".

Participants liked having a tour of the hospital as part of their prenatal classes. Other found that they rated a field trip to the hospital prior to delivery as top priority. Other researchers have found that having adolescents visit the labor/delivery, postpartum and nursery units and talk to nurses, helps them gain a sense of control by knowing what to expect (Altendorf & Klepacki, 1991; Bachman, 1993; Perry & Grew, 1993).

All participants except two preferred small group work where they could discuss issues, exchange ideas and learn from others. One participant liked to work one-on-one with the teacher (this participant was the least articulate when interviewed), while one other participant liked to work on her own (this participant was the most articulate when interviewed). Having learners work in small groups can have several advantages including "mutual support, improved task accomplishment, socialization, improved learning, increased motivation toward behavior change, and the development of insight into feelings and problems" (Nichols & Humenick, 1988, p.398). The egocentric adolescent often holds views which are one sided and one dimensional; group discussion can challenge the adolescent to reexamine her views in light of ideas expressed by her peers. Small group work may not be effective with all learners, however. Individual differences may be difficult to account for when asking learners to work in small groups. Both the shy learner or the self-directed learner may feel frustrated in a group situation (Redman, 1993). Copeland (1979) found that 60% of the adolescents she interviewed (N = 15) liked group discussion as they were able to discuss what was important to them, share information and questions and learn from each other. Lorig (1992) states that by having class members help each other within a small group setting, learners are able to see themselves as having useful knowledge to share and are provided with an opportunity to generate innovative solutions to problems which may not be thought of by health care professionals.

Participants commented that they preferred videos and posters that depicted teens rather than adults, as they felt they could relate better to the teens and that issues were not the same for the adult population. Participants also liked having other teens visit the prenatal class to share their perspective and experiences. According to Lorig (1992), an excellent way to enhance efficacy and change behavior is to provide opportunities for learners to see someone else with the same problem; the more in common individuals have, the more likely they are to relate to one another, thus it is important to try and match individuals by age, sex, ethnic origin and socio-economic status. Nichols and Humenick (1988) suggest that having previous class members return with their new babies and share their experiences with the prenatal class can help the learners integrate information learned and develop a more realistic picture of childbirth and parenting.

Several participants liked having a physician visit the prenatal class as it gave them an opportunity to ask questions they may not have thought of during an office visit. Researchers have found that the physician is often seen as the most credible source of information by adolescents and that there is a strong correlation between physician information and patient satisfaction (Levenson, Morrow, Morgan, & Pfefferbaum, 1986; Levenson, Smith, & Morrow, 1986).

Participants who attended prenatal classes at Teen Class II were offered a meal part way through the class. While the teens liked food being provided, they felt the timing of the meal was problematic as they were always hungry at the beginning of the class and, once they had taken a meal break, found it difficult to return to learning. The teens felt it would be better if the meal was offered at the beginning of the class and that group discussion occurred throughout the meal break. Altendorf and Klepacki (1991) suggest that during a meal break teens can consider what they are eating and provide each other with feedback on whether it is proper nutrition. This is likely more interesting and less threatening than a lecture on proper nutrition during pregnancy.

Participants did not like teaching strategies that 'felt like school' including 'being lectured to' or 'talked at' or having the overhead projector used as it was just like having 'notes on the wall'. Other researchers have also found that adolescents do not like learning activities that are like a classroom (Podgurski, 1993; Sorcinelli & Sorcinelli, (1987). Levenson, Morrow, and Smith (1984) warn that, because of previously negative education experiences, adolescents may regard school-like settings with suspicion, negativism and fear of failure.

Adolescents, as with adults, like to be active rather than passive learners. According to Nichols and Humenick (1988) learners report increased satisfaction and sense of control when they are able to participate actively in the learning experience. Blos (1962) states that adolescents' struggle to be independent versus dependent often results in a conflict between activity and passivity in learning and that adolescents try to resolve this conflict by assuming an active role in the teaching/learning experience.

With adolescents it is especially important to avoid a 'school-like' setting. Chairs and tables should not be arranged in rows, but rather should be grouped to encourage interaction among the learners. The teacher should avoid using 'school-like props' such as an overhead projector or podium. Using varied teaching strategies such as icebreakers, role playing and storytelling often enables adolescent learners to separate this class from 'school'. Altendorf and Klepacki (1991) recommend that adolescent learners should be provided with opportunities to move around the room both to decrease boredom and to meet comfort needs associated with late pregnancy.

Participants identified that they wanted and needed more hands-on experiences with breathing exercises to use in labor. All participants said they learned about breathing in the prenatal classes they attended, but wanted more demonstration, practice and feedback from the teacher regarding breathing techniques. Adolescents often learn by trial and error, thus demonstration-return demonstration can be an effective teaching strategy (Reedy, 1991). Several researchers have found, however, than when adolescents are with adults in a prenatal class they are often reluctant to practice the breathing exercises (Altendorf & Klepacki, 1991; Nicols, 1984; Perry & Grew, 1993). Adolescents seem less inhibited to practice breathing when they are with learners of the same age (Altendorf & Klepacki, 1991). Since adolescents often embrace a philosophy of "everything will work out fine", they tend not to practice breathing/relaxation techniques at home and thus need to use as much class time as possible for practice sessions. Practice sessions can also provide opportunities for helping the coach to be a coach; allowing the coach to gain some control and comfort with his new role.

Participants also wanted more hands-on experience with baby care, especially how to hold, bathe and settle a baby. Hands-on learning experiences appeal to the adolescents' concrete thinking. Showing the adolescent how to hold, comfort and soothe a baby can be a helpful, concrete learning experience. Using a real baby for a baby bath demonstration can be particularly effective with adolescent learners whose thinking is still concrete and focussed on the here and now (Fullar, 1986).

Reedy (1991) suggests that role play can be a particularly effective way to teach adolescents baby care as it fits with the magic way they tend to see life. Adolescents often have difficulty extrapolating facts to their own lives. Through role playing, the adolescent can be assisted in making the connection between facts and application to real life and be provided with the opportunity to practice anticipatory guidance and parenting skills. Catrone and Sadler (1984) recommend the use of biographical scripts, a type of on-going role play where the adolescent is presented with changing circumstances over time, as a way to encourage their participation in prenatal and parenting programs and to provide them with an opportunity to problem-solve and receive feedback in a non-threatening way. Biographical scripts, where the adolescents are provided with additional information as they problem-solve their way through the scenario, fits with the adolescents' concrete cognitive abilities, where games of "what-if" are often too abstract and problematic for adolescent learners.

Several participants related incidents where they had felt intimidated by the nurses in the hospital and had difficulty advocating for themselves as mothers of their babies. Adolescents can also be encouraged to role-play communication skills. Podgurski (1993) suggests having adolescents use a non-functional telephone to role-play telephone conversations (e.g. when the teen thinks she's in labor or has a problem/concern she needs assistance with) and practice assertive ways to communicate with health care providers.

One participant identified a need for more specific information for coaches regarding what to expect when their partner is in labor. Labor rehearsal is another form of role play that can be used to assist the pregnant adolescent and her coach to practice what they should/would do when labor begins and throughout the labor process. Altendorf and Klepacki (1991) suggest that the learners bring their own bag of comfort measures to the prenatal class to practice with (e.g. tennis ball, ice pack, focal point, music tapes, lotion for massage) to make the experience as realistic as possible. The bag should then be brought into the hospital when the adolescent actually goes into labor. Touch and massage are techniques frequently promoted as labor comfort measures. However, not all adolescents are comfortable with being touched and may interpret touch as sexual rather than as caring or comforting. This can be stressful to the young adolescent and confusing to her coach. Practicing comfort measures prior to the labor experience can provide the adolescent and her coach with an opportunity to reach agreement on those things with which she feels comfortable with.

Conclusions

The adolescents who participated in this research study were able to clearly identify and articulate their perceptions of and experiences with prenatal classes. The research findings will now be summarized as they relate to the research questions.

In relation to the research question **'what do adolescents expect to learn from prenatal classes?'**, it was found that adolescents in this study expected to learn about the physical and emotional changes associated with pregnancy, especially if changes they were going through were normal and how and when their bodies would return to normal; what to expect and how to cope with labor and delivery, especially how they would know labor was starting, how long it would last, what it would feel like, what would happen during their labor and how they could cope with the pain; and about postpartum depression. Participants did not identify expecting to learn about baby care, but rather felt that 'instinct' and past babysitting experiences would adequately prepare them for baby care.

In relation to the research question **'what do adolescents perceive they learn from prenatal classes?'**, it was found that adolescents in this study perceived that they learned about labor and delivery, especially techniques for coping and procedures they may encounter; growth and development of the unborn baby and the effects of drugs and alcohol on development; nutrition and the reasons to avoid drugs and alcohol during pregnancy;

involution of the uterus, exercises and postpartum depression; and how to bathe and feed, especially breastfeed, the baby.

In relation to the research question, **'what type of teaching-learning methods and approaches do adolescents prefer with prenatal classes?'**, it was found that adolescents in this study liked and wanted a variety of teaching and learning activities; realistic visual aids especially pictures, charts, models, pamphlets and videos that were up to date and depicted teens rather than adults; hands-on experiences, especially handling and bathing a baby and a hospital tour where they could try out the birthing bed; small group work with a lot of interaction; guest speakers, especially physicians and adolescent mothers; and food to be provided. Participants did not like teaching-learning methods and approaches that were too much like school, especially being lectured to or talked at or having the overhead projector used; videos that were too vivid or outdated; not having input; and repeatedly said that they didn't like anything that was 'boring'.

In relation to the research question **'what changes do adolescents identify as needed in the structure and content of the prenatal classes they attended?'**, adolescents in this study wanted more content on breathing techniques to use during labor, practical information and realistic expectations about baby care, and physical and emotional changes to expect in the postpartum period. Participants wanted more opportunities to have other adolescents visit the class and share their experiences about labor/delivery and their babies, more practice with breathing exercises to use in labor, and hands-on and practical experiences with baby care. Participants wanted to be seen as unique individuals, listened to when they asked questions, and treated with respect.

Implications for Nursing

Prenatal classes must be developmentally appropriate and sensitive to the unique characteristics of the learners. The characteristics of the learner will influence the content to be taught and the strategies used. It is the learner's developmental level, rather than their age, which will determine appropriate teaching strategies. It is essential that the nurse do a needs assessment prior to the teaching/learning experience in order to obtain as much information about her learners as possible. The needs assessment should include what the learner needs to learn, what the learner already knows, what the learner wants to know, and whether the learner is ready to know/learn. The teacher should also have an understanding of any barriers to learning, such as financial, emotional, cultural and/or physical.

The selection of an appropriate prenatal teacher is essential to the success of prenatal classes. A teacher who is democratic, sensitive to adolescents, able to share her own experiences and have fun are important qualities. According to Nichols and Humenick (1988), an effective teacher should fulfil the roles of educator, manager and counsellor. As educator, the instructor will impart information, teach skills and influence attitudes. As manager, the instructor will orchestrate activities within the class and oversee interactions among the learners and between the learner and the instructor. As counsellor, the instructor will address learners' concerns.

Content to be taught in prenatal classes should be based on learners' identified learning needs at the beginning of and throughout the prenatal course. The prenatal teacher should combine content that she deems essential or important with content of high interest and importance to the adolescent learner. Although course objectives may be determined at the first class, the class objectives (what we'll do today) should be discussed and revised as necessary at the beginning of each class. This places the responsibility for the teaching/learning experience with the teacher and the learners. Objectives, or learning outcomes, should be stated so that the teacher and the learners will clearly understand what will be taught, why it will be taught and how learning will be evaluated. Evaluation of the teaching/learning process should be both formative (how are we doing so far?) and summative (how did we do?). Evaluation should be based upon the course and class objectives.

The teacher must assist the adolescent learner to see the link between what will be taught today and how she may apply it in the future. The adolescent needs to accept the reality of the baby in order to see the need for a healthy lifestyle. Often adolescents don't perceive that their health behaviors during pregnancy will affect their baby, or they lack the information, skills and/or motivation necessary to facilitate behavior change. The adolescent therefore needs to be assisted with linking cause and effect and seeing how her behavior may affect her baby's health.

The timing of the presentation of content is essential as adolescent learners often want their immediate needs and concerns addressed before being able to concentrate on other areas. Adolescents are egocentric and need to understand their own bodily changes, in particular those concerning body image, before being able to concentrate on the needs of their unborn baby. They are also concrete thinkers and present-oriented and often have difficulty seeing the relevance of events that may not happen for some time. They are narcissistic and often believe they know everything about everything. Thus a prenatal program that may have been appropriate for adults, is likely to be inappropriate for adolescents.

The timing of when content is taught is likely to be much different for adolescents than for adults. Teaching content as close to the time of application will avoid requiring the adolescent learner to be future-oriented, something she may be developmentally unable to do. The adolescents in this study did not identify a need to learn about baby care or birth control in prenatal classes, yet in the postpartum period wanted more information about both these areas. Having an adolescent mother share with the learners in prenatal classes her experiences with the realities of full-time parenting may help the learners recognize a learning need. Adolescents may equate 'baby care' with knowing how to change a diaper and give the baby a bottle, rather than with learning how to cope with a crying baby who is difficult to soothe or settle. Baby care can then further addressed in the postpartum period in the hospital and in parenting classes in the community. Teaching pregnant and parenting adolescents should be seen on a continuum, with some learning needs addressed in prenatal classes, others addressed during the hospital stay and still others addressed in the postpartum period. Prenatal classes alone cannot adequately meet all the adolescent's learning needs.

Adolescents often report that they don't plan to be sexually active after their baby is born and thus don't need information on birth control, however many adolescents have resumed sexual activity before their first postpartum follow-up appointment at six weeks. Others plan to return to the method they were using prior to their pregnancy, even though that method failed. Adolescent pregnancy recidivism rates show that among adolescents whose first pregnancy resulted in a live birth, 17.5% had a subsequent pregnancy within a year (Howard & Sater, 1985). Perhaps it is the timing of the information that is relevant. Prenatally may be too early for the adolescent who is unwilling or unable to think about future events and possible consequences; six weeks postpartum is too late for those adolescents who have resumed sexual activity often with inadequate or inaccurate information about birth control use. Presenting practical information about birth control in the first week postpartum may be more appropriate.

Objectives should be written in terms of learner behavior that can be measured to show whether learning has in fact taken place. Learning objectives should encompass all three learning domains: cognitive, or what the learner will know; psychomotor, or what the learner will do, and affective, or how the learner will feel. Nichols (1984) suggests that teachers use a competence model as a framework for prenatal education classes. The goal of prenatal classes, according to this model, is to increase the competence of the individual in coping with childbirth. Content should address three domains: (1) psychomotor competence including skills such as relaxation, breathing and expulsion techniques, (2) interpersonal competence including information and activities that increase the individual's self-confidence and ability to make appropriate responses to stressful situations, and (3) cognitive competence including information and activities that assist the individual to obtain, classify and interpret information.

For adults, emphasis should be placed on all three components. For adolescents, because they are restricted cognitively in their ability to translate information learned to the actual situation of childbirth, more emphasis should be placed on psychomotor competence and less on cognitive competence (Nichols & Humenick, 1988). Particular emphasis should be placed on providing hands-on experiences and practice with breathing techniques and baby care.

The teacher must strive to provide learning experiences that will match the developmental needs of each learner in the class. As each learner brings with them a unique set of circumstances, this goal is often difficult to achieve. Most adolescents are concrete thinkers, thus abstract learning activities such as lectures, debates, teacher-led discussions, questioning and interviewing are not likely to be effective and should be avoided or used sparingly with clear direction. Concrete experiences such as field trips, group discussion, role playing, simulation, and some types of games are likely to be more developmentally appropriate and thus more effective and should be used frequently. When deciding how content will be presented within the context of the teaching/learning experience, many factors will be considered: the expertise, comfort level and teaching style of the teacher; the learning needs, learning style, and characteristics of the learner; content to be taught; and any constraints that may exist.

It is essential that with adolescents the prenatal teacher use a variety of teaching-learning methods and approaches and provide well paced teaching sessions. Providing hands-on experiences like prenatal tours, baby handling and bathing, and practice sessions for breathing techniques appeal to the adolescent learner. Using visual aids that are bright, colourful, easy to read and depict teens is recommended. Videos that are overly realistic or vivid may overwhelm the adolescent learner. Using slides or videos that show a birth from the side rather than head-on, are black and white, or are shown in short segments may be more appropriate and less overwhelming to the adolescent learner.

Teens like to be with other teens and can benefit from sharing information and experiences with their peers. Group discussion and interaction are essential to facilitate this process. The teacher needs to be aware, however, that adolescent learners may be reluctant to admit when they don't know something and to ask questions in a group situation. Using a question box and ensuring the teacher is available after class to answer questions on an individual basis may be effective strategies to ensure learners' questions are addressed.

Adolescents are often hungry and like to have food provided. Meal time can provide an excellent opportunity for teaching teens about proper nutrition during pregnancy and help them to see how what they eat may be affecting their unborn baby.

Indications for Further Research

Using a qualitative exploratory-descriptive method to describe adolescents' perceptions of and experiences with prenatal classes has stimulated ideas for further research. Using a larger sample size and interviewing adolescents at varying times in the prenatal and postpartum periods could generate important data on how pregnant and parenting adolescents' learning needs change over time. The qualitative method of grounded theory could be used to study the process of the adolescent's transition to becoming a mother and generate a beginning theory.

Focus groups could be used to further validate the research findings from this study. Breitrose (1988) states that focus groups work best if participants are similar, thus having one focus group comprised of middle adolescents and a second focus group of late adolescents could help identify the differences in learning needs and approaches from a developmental perspective.

Little research has been done on the learning needs of the partners of pregnant adolescents. In this study, while some boyfriends accompanied their partners to classes, overall their questions were ignored and their concerns brushed aside.

A study designed to see if attendance at and participation in prenatal classes influences subsequent interactions of the adolescent with the health care system, could generate information about the importance of the interactive component of prenatal classes with the pregnant and parenting adolescent.

Replication of this study with a larger sample size and division of middle adolescents into two groups - 14-15 year olds and 16-17 year olds - would be of value to understand different learning needs and developmental differences among middle adolescents.

Strengths and Limitations

Participants were selected for this study using the purposive convenience sampling method. A limitation of this method is that only those adolescents who volunteered and met the inclusion criteria were selected to participate in the study. Adolescents who may have held differing views may have been reluctant to volunteer. However, a strength of purposive convenience sampling is that adolescents were selected based upon their ability to provide information relevant to the research questions.

Inclusion criteria specified that participants were to have attended at least three prenatal classes. This strengthened the study as participants would have attended enough classes to be able to describe their experiences. A limitation however, is that adolescents who dropped out before attending three classes may have had valid reasons or concerns that could have been useful to know.

The participants in this study were middle adolescents, between 14 and 17 years of age. The age limit was a strength of the study as learning needs, desired content and process, and perceptions of middle adolescents would likely differ from those of early or late adolescents. However, diversity existed among the participants in terms of background, socio-economic background, education, life experiences, and support.

A strength of the study was allowing the participants to choose the place of the interview. This provided the participant with some control over the situation and enhanced comfort level.

The researcher's knowledge of and comfort with pregnant and parenting teens further strengthened the study. This provided theoretical sensitivity when interviewing, coding and analyzing the data. Meeting with participants prior to the interview also enhanced comfort level and facilitated the interview process.

Interviewing the participants in the early postpartum period enabled the adolescents to discuss the prenatal classes retrospectively in relation to their labor-delivery and early postpartum experience. This provided insight into how their learning needs had changed over time, especially from prenatally to postnatally. This study could have been further strengthened by interviewing the adolescents prenatally then again postnatally to clearly differentiate changing learning needs.

Another strength of the study is that the researcher transcribed the initial five interviews. This enabled the researcher to critique her interviewing skills and become immersed in the data. Subsequent interviews were transcribed by another party. All interviews were reviewed extensively by the researcher. Coding was done between interviews to enable theoretical sampling to occur. In this way, one interview guided the following interview.

Summary

Overall, findings from this study have shown that while adolescents have some similar needs to adults, their needs also differ. Adolescents need similar content to adults, but with more emphasis on personal body changes in the prenatal and postnatal period. Most adolescents are still attending school and have had content related to growth and development, reproduction, and nutrition covered in other classes and need to be given credit for information already learned. Adolescents want and need content presented in a timely fashion so that immediate learning needs are met. Information about birth control and baby care may be best presented in the early postpartum period.

Adolescents are easily bored. The teacher should use a variety of age-appropriate teaching-learning strategies. While adults may respond well to lectures and the use of the overhead projector, adolescents often do not. Adolescents like the use of varied visual aids that are concrete and the use of hands-on experiences where they get to practice skills and receive immediate feedback.

Lastly, adolescents are typically not 'happily pregnant', but rather are dealing with a multitude of stressors, including the stage of adolescence. Adolescents need to be recognized for their uniqueness, accepted for who they are, and supported as they attempt to make the transition to adulthood and parenthood. This is the challenge for health care professionals who work with this age group.

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APPENDIX A

Information Letter and Permission to Contact Form for Potential Informants at Agencies offering Prenatal Classes

Research Study Title:	Adolescents' Perceptions of and Experiences with Prenatal Classes
Researcher:	Leslie Sundby R.N., B.S.N. Master of Nursing (Candidate) Faculty of Nursing University of Alberta **Phone: XXX-XXXX**
Supervisor:	Dr. P.A. Field Professor Faculty of Nursing University of Alberta **Phone: XXX-XXXX**

Are you 14 - 17 years of age and went to prenatal classes during your pregnancy?

My name is Leslie Sundby. I am a graduate nursing student at the University of Alberta. I am doing a study to find out how teens feel about prenatal classes. What you tell me may help improve prenatal classes for teens.

If you want to hear more about my study, please fill out the next page and return it to ____________________. I will call you and tell you more about the study. After I have told you all about the study, you can decide if you want to take part in it.

Once you decide, I will meet with you for about one hour, once or twice to talk to you about the prenatal classes you went to. I will ask you some questions, but it won't be a test. There are no right or wrong answers. We will meet at a time and place that is good for both of us.

If you decide not to take part in my study, that's okay too.
Your care at _____________ will not change.

If you have any questions, please call me at XXX-XXXX.

Leslie Sundby.

Permission to Contact:

I, ____________________________ (please print), give my permission to Leslie Sundby to call me at the telephone number(s) listed below to tell me about the study "Adolescents' Perceptions of and Experiences with Prenatal Classes".

Signature ______________________________________

Phone Number(s) ________________________________

________________________________*

Please hand this form to _______________________ (agency contact person).

* for clients attending TERRA:

If I cannot contact you at the above telephone number, may I contact you at TERRA? Yes ________

No ________ (please check one)

APPENDIX B

Information Letter and Permission to Contact Form for Potential Informants on the Postpartum Unit

Research Study Title:	Adolescents' Perceptions of and Experiences with Prenatal Classes.
Researcher:	Leslie Sundby R.N., B.S.N. Master of Nursing (Candidate) Faculty of Nursing University of Alberta **Phone: XXX-XXXX**
Supervisor:	Dr. P.A. Field Professor Faculty of Nursing University of Alberta **Phone: XXX-XXXX**

Are you 14 - 17 years of age and went to prenatal classes during your pregnancy?

My name is Leslie Sundby. I am a graduate nursing student at the University of Alberta. I am doing a study to find out how teens feel about prenatal classes. What you tell me may help improve prenatal classes for teens.

If you would like to hear more about my study, please fill out the next page and return it to __________________ (agency contact person). I will call you and tell you more about my study. After I have told you all about the study, you can decide if you want to take part in it.

Once you decide, I will meet with you for about one hour, once or twice to talk to you about the prenatal classes you went to. I will ask you some questions, but it won't be a test. There are no right or wrong answers. We will meet at a time and place that is good for both of us.

If you decide not to take part in my study, that's okay too. Your care in the hospital will not change.

If you have any questions, please call me at XXX-XXXX.

Leslie Sundby

Permission to Contact:

I, ______________________(please print), give my permission to Leslie Sundby to call me at the telephone number(s) listed below to tell me about the study "Adolescents' Perceptions of and Experiences with Prenatal Classes".

Signature ________________________________

Telephone number(s) ______________________

____

Please hand this form to __________________ (agency contact person).

APPENDIX C

Informed Consent

Project Title: Adolescents' Perceptions of and Experiences with Prenatal Classes

Leslie Sundby (MN Candidate)
6618 172 Street
Edmonton, Alberta, T5T 3R5
Phone: XXX-XXXX

Dr. Peggy Anne Field (Supervisor)
Professor, Faculty of Nursing
University of Alberta
Phone: XXX-XXXX

In this study Leslie will ask me to talk about the prenatal classes I went to. What I tell her may help improve prenatal classes for teens.

I, ________________________ (please print) agree to be in the study by Leslie Sundby. Leslie is a Master's student at the University of Alberta.

Leslie will talk to me about the prenatal classes I went to. The talk will take place in a private, quiet place that Leslie and I both choose. The talk will be about one hour long. A second talk with Leslie may be needed.

The talk will be tape-recorded and written out in notes. The notes will be private and will only be seen by Leslie and those helping with her study. The information from the notes will be written up in a paper so other people can read it. My name will not be used. No one, except Leslie, can match my name to what I say. My parents or friends will not be allowed to sit in on the talks or to listen to the tapes. The information I give may be used to teach others and may be used in an article. What I say may be used in another study, if the study is okayed by an ethics board.

During the study this form will be kept locked up. The tapes and notes about the study will locked in a separate place when not in use. Leslie will tear up and throw away this form five years after the study is over. Leslie will keep the notes and tapes of the talks for 7 years, then the notes will be torn up and thrown away and the tapes will be erased.

I will not be paid or get special care from being in the study. I know that the information from this study may help others. I can refuse to answer any question. I can quit any time I want just by talking to Leslie. I will not be punished for quitting.

If I tell Leslie anything that suggests I or my baby may be in danger, Leslie will talk to me about this. Leslie may ask the public health nurse to come and see me if she's worried about me or my baby.

If I want to know about the results of this study, I will fill out the next page.

If I have more questions, I can call Leslie at XXX-XXXX or Peggy Anne Field at XXX-XXXX. I have a copy of this form.

Signature: ________________________________

Researcher's Signature: ______________________

Date: ____________________________________

If you want to receive information about the results of this study, please fill out this form and return it to Leslie Sundby.

Please print.

Name ______________________________

Address____________________________

____

______________________________ (include postal code)

APPENDIX D

Biographical Data

(to be filled in by interviewer)

To help me to understand my findings, I would like you to provide me with some information about yourself. If there are any questions that you do not want to answer, please let me know. All information is confidential. This information will be included in the final report, but it will be done so that you cannot be identified.

1. How old are you? ______________________

2. Are you married?

____ 1. single, never married
____ 2. married
____ 3. divorced, or separated
____ 4. widowed

3. What is the highest grade of school that you have completed?

____ 1. Grade School (state grade completed _______)
____ 2. High School (state grade completed _______)

4. Are you attending school now?

____ 1. Yes
____ 2. No

5. Do you plan to return to school in the next 6 months?

____ 1. Yes
____ 2. No

6. What is your family background?

____ 1. Asian
____ 2. Black
____ 3. White
____ 4. Native
____ 5. Other

7. Who did you live with during your pregnancy?

____ 1. alone
____ 2. mother or father (specify)
____ 3. mother and father
____ 4. relatives
____ 5. boyfriend
____ 6. boyfriend's family
____ 7. spouse

____ 8. girlfriend
____ 9. other

8. Who do you live with now?

____ 1. alone
____ 2. mother or father (specify)
____ 3. mother and father
____ 4. relatives
____ 5. boyfriend
____ 6. boyfriend's family
____ 7. spouse
____ 8. girlfriend
____ 9. other

9. Who do you consider as your main source of emotional support?

____

10. How many times have you been pregnant (including this time)?

____

11. Before becoming pregnant, was a baby desired?

____

12. Where did you attend prenatal classes?

____

13. How many classes were offered?

____

14. How many classes did you attend?

____

15. Did anyone come to the classes with you? If so, who?

____

Information about your baby:

Baby's sex ____________________
Birth weight ____________________
Baby's due date ____________________
Baby's birth date ____________________
Delivery
Vaginal ____________
Caesarean ____________
Keeping or not keeping baby ________

APPENDIX E

Sample Interview Guide

1. **What made you decide to go to prenatal classes?**

   (Don't know, insufficient answer - go to probes).
   (Full answer - go to #2).

   Probes:
   Tell me how you found out about the prenatal classes.
   Did you find out about the classes by yourself, or did you find out about them from someone else?
   Tell me why you chose to come to these classes.

2. **What sort of information did you want to know when you went to the prenatal classes?**

   (Don't know, insufficient answer - go to probes).
   (Full answer - go to #3).

   Probes:
   Tell me about some of the questions you had before you went to prenatal classes.
   Tell me about some of the things that you wondered about before going to prenatal classes.
   Did you wonder about the body changes that happened during your pregnancy?
   Did you wonder about how you felt during your pregnancy?
   Did you wonder about labor or the delivery?
   Did you wonder about the baby and how to care for the baby?
   Did you wonder about what to expect after the baby was born?

3. **What sort of information do you think that you learned about in prenatal classes?**

   (Don't know, insufficient answer - go to probes).
   (Full answer - go to #4)

   Probes:
   Tell me about some of the things that you learned in your prenatal classes.

Tell me about what you think you learned about you during your pregnancy.
Tell me about what you think you learned about the baby during your pregnancy.
Tell me about what you think you learned about you during birth.
Tell me about what you learned about you after having the baby.
Tell me about what you learned about the baby after he/she was born.
Tell me about anything else you think you may have learned.

4. **How prepared did you feel after taking the classes?**

(Don't know, insufficient answer - go to probes).
(Full answer - go to #5).

Probes:
Did you feel you learned what you wanted/needed to know about the pregnancy?
Did you feel you learned what you wanted/needed to know about labor and delivery?
Did you feel you learned what you wanted/needed to know about you after having a baby?
Did you feel you learned what you wanted/needed to know about the baby?

5. **How do you like to learn best?**

(Don't know, insufficient answer - go to probes).
(Full answer - go to #6).

Probes:
Think of the best class you've ever been in. What did you like most about the class? about the teacher? What happened in the class that made it such a good class.
How do you like to learn about something?
How was information presented in your prenatal classes?

6. **What kinds of things happened in the prenatal classes that you liked?**

   (Don't know, insufficient answer - go to probes).
   (Full answer - go to #6).

   Probes:
   Tell me about the things the teacher did that you liked.
   Tell me about the things you learned that you liked.
   Tell me about the kinds of things you did/saw that you liked.

7. **What kinds of things happened in the prenatal classes that you didn't like?**

   (Don't know, insufficient answer - go to probes).
   (Full answer - go to #7).

   Probes:
   Tell me about the things the teacher did that you didn't like.
   Tell me about the things you learned that you didn't like.
   Tell me about the kinds of things you did/saw that you didn't like.
   Tell me about the things that happened in the classes that made it difficult for you to learn.

8. **What would you like to see changed in the prenatal classes you went to?**

   (Don't know, insufficient answer - go to probes).
   (Full answer - go to #8).

   Probes:
   Tell me about the information that you learned - what should be different?
   Tell me about the way that the information was presented to you - how would you have liked to get information about your pregnancy, labor and delivery, and the baby.
   Tell me about the things that you did in the classes - what should be different?
   Tell me about the things that you saw in the classes - what should be different?
   Tell me about what was missing that you would have liked.

9. **How important do you think that attending prenatal classes are to pregnant teens? Why, or why not?**

10. **Did anybody come to the prenatal classes with you?**

    (**If no** - go to #11)
    (**If yes** - go to probes)

    Probes:
    Tell me about who came with you to prenatal classes.
    Do you think that this person felt comfortable in the prenatal classes? Why, or why not?

11. **How did you feel when you first found out that you were pregnant?**
    Did you want the pregnancy?
    How do you feel now about the baby?

APPENDIX F

Characteristices of Participants

Pseudonym	Age	Grade	Site of Prenatal Classes Attended	$\frac{\text{\# of prenatal classes attended}}{\text{\# of prenatal classes offered}}$	Currently lives with	Attended prenatal classes with
01 Laura	16	9	I	$\frac{9}{12}$ (attended 2 sets)	boyfriend	no one
02 Cathy	17	9	II	$\frac{6}{6}$	boyfriend	boyfriend
03 Kristen	17	8	I & II	$\frac{10}{12}$ (attended 2 sets)	alone	mother (1 class only)
04 Liz	17	10	II & III	$\frac{9}{12}$ (attended 2 sets)	parents	mother (site III classes only)
05 Karen	15	9	I	$\frac{6}{6}$	parents	boyfriend

06 Debbie	17	11	I	$\frac{6}{6}$	aunt & uncle	no one
07 Sheila	17	9	I & II	$\frac{10}{12}$ (attended 2 sets)	boyfriend	boyfriend
08 Barb	17	9	II	$\frac{6}{6}$	alone	girlfriend
09 Heather	17	10	III	$\frac{5}{5}$	parents	boyfriend
10 Diane	15	10	II	$\frac{5}{6}$	parents	boyfriend
11 Monique	14	8	III	$\frac{4}{5}$	parents	boyfriend
12 Alyson*	16	10	I	$\frac{6}{6}$	mother	cousin

*secondary informant

APPENDIX G

Prompting Questions

(added after the first 3 interviews were analyzed)

1. **Some teens have mentioned that they found some of the videos upsetting. Did you feel this way about the videos you saw at prenatal classes?**

2. **Some teens I've talked to like the idea of teen-only prenatal classes, while others don't think it's a great idea. Do you think teen-only classes are a good idea?**

   Why?